

LIBRARY OF CONGRESS



00017409888

















# A REVELATION.

The frequent publication of figures showing the transactions of the Life Insurance Companies of this country has to some extent familiarized the public mind with the magnitude of the beneficent work they have done; but the following comprehensive statement is a REVELATION as to what has been done by the "Greatest of all companies"

# The Mutual Life of New York.

### Since it was organized in 1843 it

Has received from its Policy-holders more than	-	_	-	388	MILLIONS
Has collected from its Policy-holders more than	-	-	***	120	MILTINIA?
Has paid to its Policy-holders more than	-	-	-	304	<b>}</b>
Has paid for its Policy-holders less than	-	-	-	65	DOLLADO
Holds Invested for its Policy-holders more than	-	-	-	140	DOLLARS.

RICHARD A. McCURDY, President.

ROBERT A. GRANNISS, Vice-President.

# HARTFORD

Is the home of the Bicycle Industry of the United States and the name of the leading medium priced Bicycle of the World.

Below we Illustrate our 1892 Patterns.



HARTFORD PATTERN C.



HARTFORD PATTERN D.

### PRICES.

Mens.

With 7 inch solid tires, \$100 With 3 inch solid tires, \$100

" 11 inch cushion tires, 105 " 11 inch cushion tires, 105

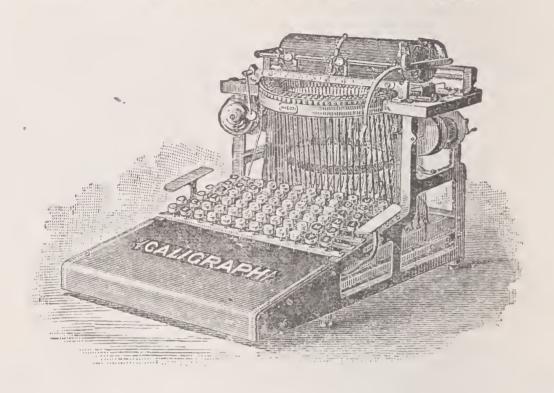
" 12 inch pneumatic tires, 120 " 12 inch pneumatic tires, 120

CATALOGUE FREE.

The Hartford Cycle Co., Hartford, Conn.

# The Caligraph Writing Machine.

"It stands at the head."



NE touch of the finger should produce any character used by the operator of a Typewriter; instruments that fail to accomplish this are deficient, and do not fully meet the necessity that brought them forth. These facts are self-evident.

"The Caligraph" is the only writing machine that fully economizes time and labor; and economy of time and labor is the best reason we know for soliciting trade. Granting that we are at the front in this, we can show that our machines excel in mechanical merit, durability and beauty of work.

100,000 daily users.

For Catalogues and Testimonial Letters, etc., address

## THE AMERICAN WRITING MACHINE CO.,

HARTFORD, CONN.

Branch Offices:

237 Broadway, New York.
14 West 4th Street, Cincinnati, O.
612 Chestnut Street, Philadelphia.

English Factory, Coventry, England.

# TOURISTS' MANUAL

### AND BOOK OF INFORMATION

OF VALUE TO ALL

# Bieyelers

935



Compliments of POPE MANUFACTURING CO.

221 COLUMBUS AVENUE BOSTON, MASS.

COPYRIGHT, 1892,

BY

POPE MANUFACTURING CO.

## CONTENTS.

TOURING AWHEEL		•	•	٠	٠	5	6
STARTING OUT	•	•	٠	•	•	•	15
HOW TO BREATHE .		٠	Ф				20
NEW ENGLAND	•	•	•	9	٠	٠	21
SELECTION OF MACHI	NE .	•	•	٠	٠	•	41
THE VALUE OF OWNII	NG A	COLU	JMB	ĮΑ	*	•	62
ROAD RACING	•	٠	٠	•		٠	67
TRAINING FOR BICYCL	E RA	.CES	٠		v	٠	74
RECORDS							
LADIES' RIDING	٠	•		•	٠	•	84
DRESS	,	•	•	٠	•		88
THE EFFECTS OF CYC	LING	ON T	HE	HEA	LTH		94
ETIQUETTE OF THE R	OAD	٠	٠	ę	,	٠	96
RIGHTS OF WAY	٠	٠	•	•	•	•	101
IT IS NOT A DREAM	-A B	ICYCI	ING	SKE	ETCH		104





O tour abroad, to be able to "walk large" over the earth's surface is the greatest pleasure afforded by the modern bicycle. Such use of the wheel is a promoter of health, arouses all the

is a promoter of health, arouses all the faculties to increased activity, and puts the mind and body in the best condition to enjoy to the utmost the beauties of nature, and the creations of man. No more-pleasant vacation can be taken than a two-weeks' — or more, if one is so fortunate — trip over the highways and byways of the country, in company with congenial companions.

But to derive the greatest amount of pleas-

ure and benefit from such an outing, some little forethought is necessary in the way of preparation. It is highly important to begin with, that your general health should be in a fairly satisfactory condition. It is not at all necessary to undergo a course of athletic training before venturing on such an excursion, but a little preliminary daily out-of-door exercise for about a fortnight will be found productive of much good. A wise man need not be told that if he is likely to need the services of his dentist, before, not after, the trip, is the proper time. I had this fact most forcibly impressed upon me while touring with a companion in lower Canada. For five days he suffered untold misery from a tooth that had long before warned him of its condition. With swollen jaws he painfully pedalled through a beautiful and interesting country, unable to eat aught but "spoon victuals," and taking no interest in anything save diminishing the distance between himself and a knight of the forceps.

But we will take it for granted that these matters have been duly attended to, and come to the next step in the program. This step, in my opinion, backed by long experience, should be the careful planning out of the route. On

this, more than anything else, depends the success or failure of the whole affair. If the country to be traversed is known to you, well and good; but if it is an unknown region, too much labor can hardly be put into this feature. Post yourself from every available source of information, as to distances between the various objective points, condition of roads, objects of interest to be seen, and the history of the prominent places or objects en route. Layout a daily itinerary and keep to it unless good and sufficient reasons should dictate otherwise. By so doing you will accomplish the tour on time, and will not be obliged to spend precious moments hunting for information which should have been secured before starting, or worrying for fear that your time will give out and that you will be obliged to resort to the steam-cars, before the final objective point is reached. I am aware that some may differ with me regarding a daily itinerary, claiming that to start out with only a general idea of the route to be pursued, and to spend the time as inclination may prompt or energy demand — and not to be restricted to just so much each day — is the only true way to thoroughly enjoy a tour. This sounds well, and might work well in some cases; but the chances are against it, especially when time and money are limited.

To begin with, if you are touring in company with others—and there are few who care to take a solitary outing—and no positive route or time limit has been decided upon before, it would not be long ere disagreements would occur on these very points, and many a time has it ended in an abandonment of the trip, or a separation; the whole affair ending in failure and disappointment.

While in Paris last summer I met a young man, who a month previous had left America with a companion, intending to "do" Europe awheel, but with only a general idea as to route and time. On reaching London, his companion, who had become somewhat disgusted by a week of rainy weather, and enamored with the gayeties of the great city, concluded that London was good enough for him, and declined to go on. Left alone the young man had wheeled to Newhaven, crossed to France and started for Paris. "If you want my opinion," said he, "as to the acme of lonesomeness, I say it is reached when one gets into a country where the language is one he cannot understand. I got lost several times,

and finally found myself in Amiens, many miles out of the way. I had good weather and fine roads, but there was no pleasure in wheeling alone, not knowing half the time whether or not I was on the right road, and I had lost four days by going wrong. So I trained from there to Paris and yesterday I sold my wheel, invested in a Cook circular-tour ticket, and am going to travel with some one who can talk English."

Last August three Portland gentlemen, thorough wheelmen, and used to touring, decided on a trip to the Adirondacks without taking the trouble to look up the condition of the roads in that section of the country. These proved to be about as bad as one can imagine, and it soon became more of a pedestrian tour than a bicycle trip. Being men of pluck and unity of mind they went over the route, as originally planned, but with little of the enjoyment that is expected on a bicycle tour. Hence, I say, lay out your route with care and be prepared for all difficulties that are likely to be encountered.

The above matters having been decided, the question is: "What shall we wear, what shall we carry, and how shall we carry it?"

First, I advise that the intending tourist array himself in all-wool underclothing, a pair of loose knickerbockers (similar in appearance to those worn by base-ball players), not quite so "baggy," but not the tight knee-pants affected by most American riders. The looselyfitting knickerbockers are more comfortable in every way, and as to looks, why that's all a mere matter of taste. In Europe the tightpanted Americans are looked upon by the natives as being very queerly dressed for tourists; their idea of such a costume being associated with acrobats and racing men. A stout flannel shirt should be worn, and any kind of head-gear that you may decide to be the most comfortable. An easy fitting shoe is of great importance, and if the trip is to be an extended one, the soles should be of extra thickness. Thick soles, in my opinion, are better for cycling, without regard to distances to be covered. A bicycle jacket of stout cloth, and of a color that will not easily show every dirt spot — I know nothing better than the L. A. W. cloth completes a comfortable tourist costume.

"What to carry," now commands attention.
To begin with, make up your mind to carry

just as little as possible, leaving out everything that "might come in handy," and taking only what you are sure to need. The necessary luggage for a tour I consider as follows: a complete change of underflannels, extra pair of stockings, flannel shirt, and toilet articles. To these may be added a "sweater," if touring in the fall of the year, or if the route takes you over the mountains where cold winds are prevalent. Rubber garments are a delusion and a snare; if made of thin material, they are not waterproof save in very light showers, and if thick enough to shed the rain, they are so heating, and one perspires so copiously, that he might as well have submitted to a ducking from the clouds, and taken some comfort while the operation was in progress. Better by far, when caught in a shower to "put her through" till shelter is reached, and then send the wet garments to the laundry. This is one of the times when the sweater comes in handy, since it takes the place of the bicycle jacket while that garment is being dried before the fire. The only rubber garments worth taking along are rubber sleeves either buttoned, or made tight about the wrist by elastic. The arms, from their position when holding on to the handle bar, receive more of a wetting than any other part of the body, and can thus be protected without discomfort and some benefit.

What is to be carried, save possibly the toilet articles, should be neatly rolled in a piece of enamel cloth, and put on one of the bicycle luggage-carriers now on the market. Be sure and get a carrier that fastens to the head of the wheel. This is the best place for the bundle, since the weight is felt less there than elsewhere, and the package cannot drop off without your noticing it. There is, however, a most excellent little carrier that is very neat and handy and which fastens on behind the saddle, on which small packages, such as a case containing toilet articles, can be taken. It is called the "Barkman" carrier, and is a most useful auxiliary when touring. I have seen many schemes put in practice for carrying a camera, but none of them were very satisfactory. If placed where they are subjected to jar, they sometimes shake to pieces, and if carried over the shoulder, thus preventing all jarring, they are always in the way, and a burden. Nevertheless, the pictures are pleasant souvenirs of a tour, and one must decide for himself if they are worth the trouble. If cities

or large towns are included in the route, where a stop of a day or two is to be made for sight-seeing or calling on friends, it is a good plan to forward by express a citizen's suit to meet you on arrival. The change will be pleasant, and one can go about the streets with less consciousness of his personal appearance than if dressed in a travel-stained bicycle suit. A costume that looks well and proper while on the road is hardly the thing in which to attend church or enter a drawing-room.

As to your mount, I can only say that if you intend buying a wheel, do not run after "strange gods," and purchase some new aspirant for patronage just because some racing man has made a marvellous record on it. A racing wheel and one adapted to touring are two widely different articles. Changes are being made in tires, springs, etc., even while I am writing this, and much depends on your weight, and the care or lack of care which you bestow on your wheel. But it is good advice, I think, to say that you had better put your trust in one of the long established makers. All that money and experience can do toward producing a reliable wheel has been done by them, and they have every reason to mount

you well, and are able and willing to stand behind the product of their factories.

Between forty and fifty pounds is a good weight for a touring wheel. If your wheel has been run one or more seasons, and the trip is to be an extended one, better send it to the factory, or the next best place, and have it thoroughly overhauled.

Everything is now ready, and with good weather and pleasant companions you will have a very enjoyable trip.

FRANK A. ELWELL.



### STARTING OUT.

4

HEN a man starts out on a railroad journey he expects the railroad company to not only provide the best and safest rolling stock but to see that

it is kept in perfect order.

Men are stationed at certain points whose duty it is to look over—and under—every car that comes in; test the wheels; feel of the parallel bearings; screw up the loose nuts if any; put in some more oil, etc., etc. Neglecting to do any of these things lays the company liable for any damage that might be sustained by a passenger.

This same passenger, who is so ready to sue a railroad company, is liable to neglect some of the most ordinary precautions, "inexcusable in a railroad company." But when it comes to his own bicycle, he is sometimes criminally careless.

A nut begins to work loose. Does he notice it? Not he! He starts off on the road with all the childlike confidence that he was born with. The machine can't need oil, for it hasn't squeaked. He is "just out of oil anyway, but will get some when he goes to town"—if he don't forget it—and meanwhile those little balls grind around in a paste made of sand mixed with what was once oil. If the machine is of the best quality—and all machines are—he takes a dollar out of it for every cent he saves in oil and attention.

These matters are very important when the rider is "close to shore," but when he goes out into deep water they are vital.

In the first place, don't buy a machine unless you have the best of reasons for thinking that it is a good one. Other things being equal, an old established concern should be able to make a better wheel than one with less experience; but the safest way, so far as material and workmanship are concerned, is to go on the maker's reputation, but always have your eye open for weak spots.

Having gotten your machine of whatever kind

and quality it may be, look it over very carefully before starting on a long trip. See that the bearings are adjusted properly, always be sure that they are not tight enough to prevent perfectly free running, and above all, see that every moving surface is thoroughly covered with good oil. Don't be afraid of having the oil work out over the machine. There is no part of it that can be injured by oil except the tires and if the machine is cleaned as often as it should be the oil need never get as far. Always remember that as long as the oil running out of a bearing is black it wants still more. There is another very important thing not generally appreciated by wheelmen. When you are out riding amid the beautiful scenes don't forget the kerosene. Have a can of it in your cycle barn, and not less than once a month give all the bearings a good allopathic dose of it. Don't use turpentine, benzine, or any similar thing, but just plain kerosene — the servant girl's favorite means of suicide.

It should not be depended on as a lubricant to much extent, though in a one-mile race I would advise the copious use of it and nothing else, and you would be surprised to know of the close finishes that might have been won by the other fellow and one teaspoonful of good kerosene oil.

The little oilers which all furnish with their machines are well to have with you on the road for short runs, but don't bother with them except on the road. It is too much like eating peas with a one-tined fork. Buy a ten cent zinc oiler. It will hold about one-half pint of oil. Keep this in your barn and use it. Then keep that old undershirt that you discarded last spring where it will be handy to use in wiping the oily parts as often as they need it.

When you go on a long trip, stick a small potato on the nozzle of the zinc can, wrap it up in the aforesaid shirt, and take it with you.

Don't adjust your chain too tightly. This is a common mistake. When a slight pressure is on the pedal the lower side of the chain should never sag less than one-half inch, while double this amount will do no harm, if the chain and sprockets are what they should be.

If you want to "make assurance doubly sure," you might take a few extra balls (for I assume that you are afflicted with the popular contagion), also an extra bearing cone and case of each size, for the breaking of a ball may also spoil the track.

An extra nut of each kind don't weigh or cost much, and any thrifty maker would gladly furnish them to you at the regular price. If you use a cemented tire it might be well to take along a little tire tape of the kind that has "gumstickum" on it. Also a small quantity of strong fine cord.

You should have a good wrench, a screw-driver and pocket-knife, and, like the poor, have them "always with you." A large, light waterproof cape is a good thing to have on the road, and will be found more useful than a full-dress suit.

Always have with you some good woolen

outergarment. A knitted "sweater" will do though a coat is looked upon with more favor, especially in agricultural circles.

Be careful what you eat and drink—especially the latter. Don't



swear. Take a dog paralyzer and a copy of Elliott's Old Hickory Almanac, and you will get through in good shape.

STERLING ELLIOTT.

OW TO BREATHE CO SHOULD like to make a call that would reach every woman in the country," writes Mrs. Henrietta Russell. "Lift up your chest. Lift the chest, keeping the shoulders down, until it is on a line with the toes, and thus throw the tension on the centre of the body where it should be, leaving the heart and lungs to have free play. Close the lips, draw the air in through the nostrils until a pressure against the ribs is intolerable. Hold the tension firmly, steadily, as long as you can, then gradually let the breath out through the lips. Try this breathing, inspiration, retension, and expiration when the body is free, in the morning when you dress. This lesson in correct breathing when throughly learned, is a certain cure for nervousness and shyness, and gives command and freedom of motion, and sense of power to the most selfconscious and hesitant natures."

## ENDORSED BY ALL ATHLETES

At Headquarters for Sporting Goods, They Recommend It.

BOSTON, Feb. 23, 1891.

Messrs. I. S. Johnson & Co.

Gentlemen:—Your last lot of Anodyne Liniment and memorandum of advertising books have been received. We will do our utmost to bring the liniment before the public, as we can recommend it.

Addan J: Manual Alexander

## DO YOU SEE THE POINT?

THAT ALTHOUGH originated in 1810 by an Old Family Physician, Johnson's Anodyne Liniment could not have survived over eighty years unless it possessed extraordinary merit.

For Household Use Unlike any Other.

Johnson's Anodyne Liniment is Soothing, Healing, Penetrating. Once used always wanted; and dealers say "Can't sell any other."

FOR INTERNAL AS MUCH AS EXTERNAL USE.

Boston Athletic Association.

Boston, Nov. 20, 1890.

I. S. Johnson & Co.

Dear Sirs: —The Johnson's Anodyne Liniment came to hand in good shape. The boys all like it. For bruises, strains or muscular lameness it most certainly is all that you can claim for it. Wishing you continued success, I am Yours truly,

7 AS Corrish

Athletic Manager.

Why suffer from sore muscles? Johnson's Anodyne Liniment makes them very pliable.

### A STRAIGHT TIP FOR ATHLETES.

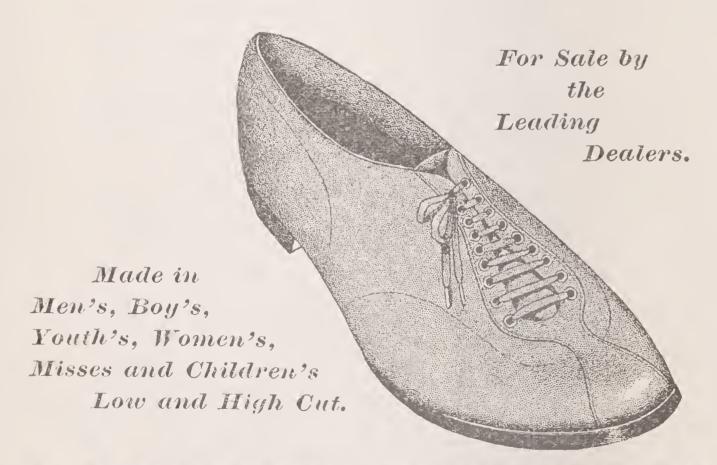
Every Bruise, Cut, Sore Muscle, Stiff Joint or Strain flees from Johnson's Anodyne Liniment as from a wrath to come. Sold by all Druggists. Price 35 cents per bottle. Six bottles, \$2.00. Every traveler should have a bottle in his satchel.

I. S. JOHNSON & CO., 22 Custom House St., Boston.



## L. A. W. SPECIAL BICYCLE BAL.

All Shoes having this Trade Mark are of the NORMAN & BENNETT, Boston, make. They are the best fitting, best looking, and most comfortable shoes made for Bicycle Riding.



L. A. W. SPECIAL BICYCLE OXFORD

### NEW ENGLAND.

### MAINE.

O State can offer more inducements to the pleasure seeker than Maine. From Passamaquoddy Head to Stamford stretches its line of rugged coast with grand and picturesque contrasts of sea and land: from the interior, with its rivers, lakes and mountains, is stretched the warm hand of welcome to lovers of nature

trasts of sea and land: from the interior, with its rivers, lakes and mountains, is stretched the warm hand of welcome to lovers of nature unadorned, and the disciples of the rod and gun. The beaten paths of its travel are but a step removed from the leafy by-ways which open up a virgin world. For ease of access, facilities of inter-state journey, excellence of hotels and fairness of roads, Maine leaves little to be desired. In this article, which is for the tourist wholly, nothing but a passing notice need be taken of those hotels which cater to the business roving public: at best they serve him as a convenient resting place only, as he wings his flight beyond the thought or sound of trade. By some strange

coincidence the average summer resort hotel seems to be located anywhere from one to a dozen miles from the most attractive nooks of nature in its neighborhood; stranger still is the fact that in connection with most of them is a livery more or less first class in its turnouts, and invariably so in its prices. Whether or not this peculiarity of location and livery is too remarkable to be a coincidence only a thorough knowledge of the law of probabilities can determine. However, it is of little moment to the lucky itinerant awheel. This fortunate individual is supremely independent of the all powerful Jehu who is a sort of modern ogre to those who are dependent upon his kingly whims. It is beyond my comprehension why so few of the great army of vacation vagrants are oblivious to this fascinating adjunct to their enjoyment, — a bicycle. puts them in touch with a thousand phases of nature's loveliness, of which otherwise they must remain ignorant. It stands ready at hand, never obtruding itself, and yet it bears one swiftly and silently over highways impassable to a coach and four and where the feet would tire. I know of no aspect of a rambling outing which bespeaks more eloquently

the zest of "dolce far niente" than to come upon a wheelman stretched at his ease on the shady shore of some inlet of old ocean, with his steel horse quietly resting against the gnarled trunk of a forest monarch:—

Within his ears, the siren song of the deceitful sea; Before his eyes, the untold wealth of nature's treasury.

By all means then, let every tourist take his bicycle along with him, and if he has none, get one, but let it be a first class one. Then whether at mountain, lake or sea-shore he will have a companion which possesses the power of infinitely widening the scope and depth of his enjoyments.

Some philosopher has aptly said, that the intuition of the masses was of more value than the fine-spun subtleties of pundits. The same conclusion might justly be applied to wheels. Go where you may, and take what wheel you will, there will be but one question asked, and that is, "Is it a Columbia?" Verbum sap. The Maine Division of American Wheelmen publish a road-book of the State giving places of interest, routes and hotel rates. It may be procured by application to the secretary of the division, Portland, Maine.

The touring cycler should not plan a trip

through Maine with the expectation of finding "sandpapered" roads, because he would be grievously disappointed. Maine roads are dirt roads, sometimes good, often fair, and in some places under certain conditions, unridable. In spite of this condition of the highways it is possible to plan and carry out pleasant and enjoyable tours throughout the State.

The tourist should, however, if unacquainted with the section he wishes to ride through, consult some local wheelman as to choice of routes, since it often will be found that the direct road will be absolutely impassable owing to long stretches of sand, while a slight detour would carry one over a good road. The State of Maine is symbolical of life in one respect, yet, though the cycler finds his way, it has many "ups and downs;" there is always consolation when climbing a long grade, in knowing that the coast must follow.

For picturesque beauty Maine cannot be excelled, and many artists recognizing this fact annually make pilgrimages thither. To all tourists who appreciate the beauties of nature and are willing to make a little exertion to enjoy them, Maine is worth a visit, and many a pleasant and enjoyable vacation could be

passed among the hills or along its picturesque coast.

In the extreme eastern portion of the State, from Lubec to Aroostook County, the roads are very fair and the scenery fine. Elwell's "Blue-nose Tour" was through this section, and was made in the old days of high wheels. With the modern safety the trip would be easier and more enjoyable.

The middle section, along the Kennebec river, will be found also delightful. The roads are somewhat hilly, but generally of hard bottom, and easily ridden. The beautiful views to be obtained from the hill tops will be found well worth the exertion required to climb them.

The numerous summer resorts need no mention, but at Mt. Desert the wheelman will find a fine system of roads all over the island, the surface being exceptionally good (for Maine) with wild and picturesque scenery, combining sea-coast and mountains. The road from Bangor to Mt. Desert is not so good, but is generally fair.

In the western section of the State the roads are not up to the average, that is, for any extended tour. From Portland going east

they are not bad, though there are many stretches of sand.

For a distance of twelve to fifteen miles from Portland, in any direction, the scenery is delightful and the roads only fair, but from Saco west, the roads will be found very sandy, and even walking is hard work.

The hotels will be found rather better than the average, many of the small towns being able to furnish first class accommodations to the weary and hungry cycler, while pleasant and social people will be met with on every hand.

John Calvin Stevens.

Chief Consul, Maine Division, L. A. W.

## NEW HAMPSHIRE.

NEW HAMPSHIRE is especially attractive to the tourist. From its white crowned peaks on the north and west to its wave-kissed bit of shore on the southeast it affords unlimited opportunities for satiating the enthusiastic pleasure-seeker's desire. Although possessing but eighteen miles of sea-coast, yet that eighteen miles abounds in beautiful scenes and delightful retreats, beginning at Hampton with its

sandy, rocky beach, over which Boar's Head stands as a sentinel, and ending at New Castle, so picturesque with its forts, its fishermen's abodes, and its delightful scenery. Standing at Boar's Head, by day you observe Little Boar's Head and the Isles of Shoals, by night the great red and white revolving light of the Shoals startles you on the one side and across the broad expanse of water as if in a thoughtful mood stand the two silent white beacons of Thatcher's.

Little Boar's Head, covered with private cottages, is a short and pleasant drive from Hampton. It is also scarcely ten minutes walk from Rye Beach. This caters to only a select class of summer visitors, being somewhat exclusive. Very fine roads abound here about, in fact the ride from here to New Castle and Portsmouth is filled with pretty views. New Castle is a delightful place for a sojourn, so many interesting, historical and antique features being connected with it. Here are the old forts, most notable being Constitution, the block house built in one night in the days of the Revolution, thereby scaring away the British gun-boat, which thought that a force able to do this was too large for them to dislodge.

Old White-back Light rises from the center of the harbor, the life-saving station is always an interesting place. Then cross the toll-bridge into Portsmouth, with dinner at the Rockingham, undoubtedly the best hotel in New England outside of Boston.

This is the whole of the sea coast area of New Hampshire. Its inland towns are simply representative towns of any good country district, each one having one or more inducements, either historical or natural, for the vacationist to stop at and inspect. Probably the most attractive, and one which is dear to many a citizen of the United States, is the town of Exeter with its well laid streets, fringed by lofty elms, its well kept grounds and its beautiful modern residences. This is the seat of Phillips Exeter Academy, affording instruction to about three hundred and fifty young men annually.

Lake Massebesic, called a lake but in reality a pond, is in the suburbs of Manchester.

When we speak of New Hampshire, of course the first thought is of its White Mountains, with Lake Winnepesaukee adjacent. These are too well known to need an extended description. The shores of Winnepesaukee are

covered with beautiful towns, all of them interesting to the tourist,—Wolfboro, The Weirs, Tilton, etc. The White Mountains of course offer varied attractions: The Flume, Profile Lake, Echo Lake, Old Man of the Mountains, The Notch and others. In nearly every possible niche of the Mountains some large hotel is located, surrounded by interesting bits of scenery.

The roads in this vicinity will be found fairly good for riding. Most of the towns in the state have very well-kept streets, but the country roads are only fair. In the southeastern part a great deal of sand is encountered: coming up from Haverhill, Mass., through Exeter and Epping towards Concord there is a large tract of clay soil more or less disagreeable in the rainy season. Steep hills abound throughout the state, many of them impossible to climb and unsafe to coast. Still, in every respect, New Hampshire holds her own with her sister states. For the pleasure of the tourist the people will be found hospitable and entertaining although somewhat more simple and uneducated than in many other sections.

#### VERMONT.

The old Green Mountain State furnishes many pleasant recollections to those who have journeyed within its borders, and has much in store to please the stranger who may come within its gates. Its scenery, while for the most part the same as in any mountain region, still has much that is in its way novel. Of course it has its historical features in Bennington, Lake Champlain, etc. The shores of Lake Champlain are covered with beautiful scenery. Its mountains present many interesting and attractive retreats for the enthusiastic pleasure-seeker. The roads are in good condition for the most part.

The rider will observe many antiquated customs as he goes along, noticeably the fences, covered bridges, etc. The larger towns and cities are possessors of good streets, but outside in the sparsely settled districts they are not very well cared for, although for the most part in fair condition, presumably from the rocky nature of the country.

There are of course many hills, most of them steep. The rider must use good judgment in riding in this State.

The people will be found very hospitable and very well informed as a rule. The hotels are good; the character of the State appealing directly to the vacationist prompts the making of room and table attractive. The air is very pure and invigorating, a panacea for the overworked business man or for the hay-fever sufferer.

#### MASSACHUSETTS.

Massachusetts has so many attractions for the tourist to inspect that to see them all and to do all justice requires more time than the average vacationist can afford to give. From Woods Holl on the south to Newburyport on the north, the coast forms one continuous line of snug harbors, broad beaches and attractive country, with many and varied interesting features.

The almost perfect roads of the state are well known to all riders either by experience or by reputation. Cottage City is the Mecca for a large number every year, the dusty pilgrims coming awheel from all parts of the State.

Boston is always alive with wheelmen, and

it gives them every advantage. Fifty miles around the boys cover many a time during the season. The Reservoir at Chestnut Hill, Franklin Park and Bailey's at Natick are great "stamping grounds."

The historical Lexington, Concord, Bunker Hill, Wayside Inn, etc. are of easy access. There are a thousand and one places in and near Boston that every one wants to see, and the visitor is in great quandary to know which to "take in" first.

Not one of the sea-shore towns but what has its attractive features.

The Berkshire Hills, so well known as an exclusive resort, in point of scenery are a very desirable place to visit. The roads both in quality and grade are not for the most part conducive to wheelmen's full enjoyment.

Springfield has become the head center for bicycle racing, and especially since the World's Records were made there last year.

Massachusetts is to be congratulated at having so perfect a track within her borders. The state as a whole will be found very interesting. In many respects it leads the world, in every respect it is second to none.

#### RHODE ISLAND.

NATURE has been especially kind to Rhode Island. Her natural beauty, however, has been greatly enhanced by artificial means and all that money and good judgment can create. Who can, in a word description, fully expatiate upon its many and varied interesting features? There they are. See them for yourselves. If I should attempt in this small space to enumerate them, you would be disappointed, inasmuch as a large number would probably have to be omitted. They must be seen to be appreciated. The cycler can find tongues ready to direct, and beautiful roads which will enable him to inspect. Narragansett Pier affords many opportunities for satiating the tourist's desire for recreation. It is as popular, although not as exclusive as Newport, and like it must be seen to be enjoyed. Block Island, so well known for its blue fishing, looms up a little way from the coast. Here will be found a typical summer resort with its many fine hotels. The roads of Rhode Island are for the most part good. Its manufacturing centers, Pawtucket, Woonsocket and Providence are a little removed

from its sea-shore resorts. The state is very symmetrical, not very many nor very high hills. The roads in the vicinity of the beaches in a few instances may be found a little sandy, but for the most part are well looked after.

Not much of "little Rhody" is especially attractive outside of the places already named. Still what it lacks in quantity it makes up in quality, and next to Maine undoubtedly harbors within its borders during the summer season more pleasure seekers than any other state.

## CONNECTICUT.

VERY little has been sung of the glories of touring by wheel in Nutmegdom, and perhaps the silence is vastly suggestive; it may be the voiceless eloquence of awe in contemplation of things so fearfully and wonderfully made as are most of the roads of Connecticut. But while it may be true that we have no good roads beyond local fame, the geographical position of Connecticut right in the straights of intercourse between the two great wheeling centers of the East, — New York and Boston,

makes our state a stamping ground for the New England and searching vacation wheelman; and raises the constant question of direction and virtue as to our roads.

A glance at the map discovers that Connecticut is divided into four considerable watersystems; the Housatonic and Naugatuck in the West, the Connecticut midway and the Thames system in the East.

The Housatonic River, breaking through the hills of Salisbury and Canan in the northwestern corner of the state, makes entrance for the cyclist from southern Berkshire; but the Housatonic river road southward, is, throughout, bad, while the old post road to Hartford via Norfolk and Winsted may be, as a matter of distinction, possibly better. However, either of these roads will furnish food for the curiosity and plenty of experience.

From New York City along the shore of Long Island Sound fair to excellent riding is to be had over road and side path to the Rhode Island State line, through a route partaking of the impetus of metropolitan proximity in good roads and suburban residences; of smart manufacturing city and town; or of gay summer resort, in the season. Diverging

from this main shore road to the north, and between the lower Housatonic and the New York State line, are also found several excellent roads. The Naugatuck River roads are fair for forty miles and several routes connect the Naugatuck with the Connecticut Valley district.

New Haven is practically the eastern limit of the summer cycling throng by the shore road; although for seven miles yet eastward to Branford, is the favorite scorching ground of the New Haven cracks. A majority of the touring wheelmen turn north at New Haven, through Meriden and New Britain, or by way of Cheshire to Hartford; over roads from fair to fine, and running with the trend of the hills and their consequent favor. The tourist will do well to linger with New Haven longer than we are here permitted. Several excellent runs to the shore-lying summer resorts near the city, and the long climb to East Rock Park are among suggestions of New Haven's hostilities.

Midway on the northern boundary of the state a broad undulating and fertile valley introduces the Connecticut River to its namesake. From its eighteen miles of expanse at

the Massachusetts boundary, this valley, thirty miles south, at Middleton, suddenly narrows and the river takes a southeasterly course thence to the south; elbowed and frowned upon by rugged hills, while in a westerly direction, the characteristic features of the Connecticut Valley extend on between parallel rifts and hills to Long Island Sound at New Haven. In the valley proper, and within the sweep of its continuation above mentioned, are to be found the best roads in the state, the prevailing surface throughout this region being a hard clay and sandstone mixture. Such contingent advantages of soil for the connecting through roads, together with the outlying streets and local riding districts of the closely placed cities and towns, make this region the hive of Connecticut wheeling life and is always acceptable touring, furnishing rest to the eye and relaxation to the legs. The outlying streets and avenues of Hartford present an enviable macadam surface, which in several directions extends well into the country. Northward to Springfield, Mass., the tourist may go via Windsor and Windsor locks; thence by ferry across the big river to Warehouse Point, to continue northward by

road and side path; or he may cross directly to East Hartford and hold road north, twenty-six miles over surprising side paths for most of the way. A beautiful route leads out Farmington Avenue, through West Hartford, by the city water supply in the high land of the Talcott shed, to Farmington, ten miles. East, to Manchester, ten miles, mostly side path: south, to Middleton, fifteen miles and southwesterly to New Britain, ten miles, or to Meriden, eighteen miles, and New Haven, thirty-six miles.

Probably no more numerous and anxiously put interrogation from the East-bound tourist by wheel may be found abroad, than that of, — "How shall I get from Hartford to Worcester or Boston?" Springfield is but a poor key, since at twenty-seven miles from Hartford one is hardly nearer Boston than at the start. If it is not desired to visit Springfield and is desired to stick to the wheel from Hartford to Boston, the route via Manchester, Bolton Notch, Andover and Willimantic, thence to Brooklyn, Danielsonville, Worcester and Boston is by far the better way; and this takes us over the shed of the Bolton Hills, introducing Eastern Connecticut.

From New London, along the western bank of the Thames River to Norwich, fourteen miles, is a monstrous road which is not tempered as it approaches the city, and indeed it would be difficult to find a greater conspiracy of natural forces in sand and rocky humps than has sat down on the outlying roads and inlying streets of Norwich, with no apparent protest from the "rose of New England," — a city of the highest culture in schools, in art and music and withal, of great wealth. Still northward, along the valleys of either the Willimantic or the Quinnebaug rivers and particularly the latter is to be found fair to indifferent riding; the fair partaking of the mill village side path and the indifferent of the untamed country. Sixteen miles north from Norwich the Quinnebaug valley widens and the roads show improvement in grade and surface; and Danielsonville, twenty-five miles from Norwich, possesses the only local riding district in Eastern Connecticut. To the débutant, all cross country riding in the east as well as elsewhere in the state, approaches the diabolical; but the local rider knows many a crook through the hills which only waits the pilgrim's interrogation.

This view of the roads of Connecticut is the photograph of judgment based upon an experience with all sorts and conditions of the genus "highway." If we have not waxed eloquent at times, the reader may attribute the absence of fire to our honesty of purpose.

ARTHUR ALLEN DEAN.



# SELECTION OF MACHINE.

4

such a wonderful growth in the bicycle business, that the buyer who desires to receive the best value for his money must use care and judgment in selecting his machine, for to-day there are about one hundred makers and importers in this country, while only a few short years ago the Pope M'f'g Co., Cunningham Co., and Stoddard, Lovering & Co. were practically the only dealers.

It is not the intention, nor desire, in this article to enter into a detailed description of different makes or machines — nor to dwell on their merits or demerits — but to endeavor to convey to the reader, or intending purchaser, a few suggestions which may be useful in selecting a mount.

The ordinary, or high machine, is still largely used and has many strong adherents;

in fact, this machine is adapted to and recommended for young men and careful riders, but as the demand is now so largely in favor of the Safety, we will devote the space to this machine, and the principal suggestions for selecting the Safety machine may be applied to the Ordinary. As there is scarcely any demand now for tricycles, we will overlook that machine.

There are to-day, made and sold in our country, many different patterns of safety bicycles—high, medium and low grade,—each of which has its place in the cycling world. In the selection of a machine, remember that the best is the cheapest, and by all means purchase one of high grade if your purse will admit of it. The first and most important step is the selection of a machine made by a company that is known to be reliable; who use in the construction of their machines nothing but the best material; who employ the most skilful workmen, and last, but not least, who fully guarantee every machine put out by them.

Probably the most important point in the selection of a machine to-day is in regard to the tires, and this should, to a great extent,

be governed by the condition of the country and roads on which the machine will be mostly used. For a generally level country with good hard roads, I can recommend the machine with solid tires; these have had the severe tests of several years, under all sorts of conditions, and I know will give satisfaction.

For a country in which roads are soft or sandy, the cushion tire is peculiarly adapted, — principally on account of its wide bearing surface, which prevents the wheel from cutting into the ground as readily as would the smaller solid tire, thereby saving much exertion for the rider. One of the most important advantages of the cushion tire is noticed in the ease and comfort when riding the machine, and the freedom from vibration.

The next tire is the pneumatic. This has not yet been used extensively in this country, for the reason that a tire has not been made which was considered perfectly satisfactory, and makers generally would not and could not afford to put out a tire, the success of which was doubtful.

This tire is an expensive one to make, and being considered somewhat in the light of a luxury, buyers would not care to purchase it

unaccompanied by a guarantee. The ability to make a tire which would not easily puncture, which would retain the air when once inflated, which had great resiliency, and which could be readily attached and detached, seemed to baffle tire makers, but these difficulties have been greatly overcome. The Pope Manufacturing Company have now put on the market a pneumatic tire, which it is claimed possesses all the desired points. This tire was obtained only after much experimenting and expense of time and money, in order to meet the demands of the public.

The necessities of a pneumatic tire, are rubber to retain the air, and canvas of a quality suitable to withstand the strain of air under great pressure. The Columbia tire possesses these points. The inside wall, or core, is of rubber, next to which is a double layer of canvas, solutioned with rubber, and vulcanized to the inner tube, — the outer tube, or covering, is vulcanized to the middle or canvas wall, — the whole being so constructed as to stand great resistance to puncture, and to be very long-lived.

The advantage of the pneumatic tire over the cushion is about the same as the cushion

over the solid. The pneumatic tire is recommended for roads of any kind, save, possibly, where they are very stony or rocky, but it is particularly for sandy country, since it is here that the large tires make themselves valuable to their owners; this same holds good for riding on wet roads, as a prevention to slipping, and on rough or rutty roads as a relief from jar and vibration. The pneumatic, of course, is just in its infancy, and if there is any doubt as to the quality or reputation of the tire, think twice before buying. You must make up your mind that you are taking some risk, and unless you are willing to give your machine some care and attention — for it requires more than the solid or cushion tire willing to repair it in case of injury, and favor it in many ways necessary, do not buy it. The makers will give you the best they have, but you will select the machine you desire, and you should be ready to take some chances.

We might add that one point in favor of pneumatic is, that the machine can be constructed lighter than with solid or cushion tire. The next important point which suggests itself is

#### THE WEIGHT.

A mistake is frequently made in selecting too light a machine—"a racing machine is not adapted for road riding." As in the case of tires, so in the case of weight, the general condition of the roads and the weight of the rider should be considered. Do not make up your mind that you want the lightest machine obtainable. A light machine may answer the purpose when used by a careful rider on good roads, but for most riders the medium weight machine is more desirable, will last longer, cause less trouble, and give better satisfaction in the end. Next comes

#### THE FINISH.

The preferred finish on machines, by riders to-day, is what is known as enamel with nickel trimmings; the larger parts, frame, fork and guards, are enameled, while the smaller parts, handle-bar, brake connection, cranks, pedal frames, hubs, etc., are nickeled. This gives a machine a handsome appearance. The enamel used on Columbia machines is durable and handsome; in nickeling, every care and expense is taken to have the finish the best,

and the results are all that can be desired,—both enamel and nickel are easily cared for.

#### DETAILS.

In the matter of equipment little can be said, for except in a few cases, regular patterns should be taken. In fitting up a machine, such parts are used as will suit and give the best satisfaction to the majority, and when a rider wishes something special, it can generally be had. The machine now being selected, the next step is to learn

### HOW TO RIDE.

Before taking the first lesson, a word as to the adjustment of saddle and handle bar. For the beginner it might be well to have the reach a little short, and lengthen it as the riding improves. For the experienced rider, the saddle should be set at a point which would leave the leg of a rider nearly straight, with the pedal at the lowest point; this is the natural position, and is one from which the best results can be obtained, with less exertion or expense of strength on the part of the rider. The handle bar can be raised or lowered, as the case may be required, so that the rider when in the saddle will be in the most natural and comfortable position.

The machine now ready, and the rider, provided he be so unfortunate as to have no instructor to whom he can look for assistance, must make up his mind not to become easily discouraged or impatient, if his first few attempts fail to show any advancement. Some persons acquire the art readily and master the machine in a few lessons, while others find it more difficult, and take several lessons before the machine can be mounted and balanced. But few suggestions are necessary before the would-be rider can make his first attempt.

The beginner should stand directly back of the machine, with one foot on either side of the wheel, and the hands resting lightly, but firmly, on the handles, to steady and keep it in an upright position; then raise the left leg, the foot resting on the step, and start the machine by hopping on the right foot. After the machine has some momentum, cease the hopping and take the right foot from the ground and rest the weight of the body on the machine, retaining the left foot on the step and the hands on the handle bar. It is well to remain in this position as long as the machine is in motion as it will assist in learning to balance, and give the rider some idea of the steering, which appears very sensitive at first.

Even in this early stage you will notice a tendency on the part of the front wheel to turn either to the right or to the left, and a desire on your part to get on terra firma, but stick to the step as long as the machine is in motion, and when there is an apparent danger of falling, turn the wheel in the direction in which you appear to be falling, and not in the opposite direction as it would seem natural to do. The wheel, turned in the direction which appears to be dangerous, will right it, while the jerk or wrench necessary to right a wheel, when turned directly opposite the way it inclines, will be sure to result disastrously and probably bring the rider to the ground.

As soon as you have succeeded fairly well in steadying the machine, while riding on the step, the next move will be to gain the saddle. To do this, put the left foot on the step and start the machine by hopping as before; when the machine has sufficient momentum, and the rider has control of the steering, lean the body forward and raise the right leg until it rests

partly over the saddle, and then slide forward gently into it. Do not remove the left foot from the step until well into the saddle, as very likely the machine will show a tendency to topple over, and if you can revert to the step, you can right it easier than if fixed in the saddle. If, however, you succeed in properly gaining the saddle, seat yourself comfortably, and then feel for the pedals. We will now suppose that the rider is seated in the saddle, and, after gaining the pedals, he will probably find it difficult to keep the feet on them, but no matter how successful in this, the distance which you would succeed in covering, would probably be but a few yards before you would be off the machine; but don't let this discourage you; remember the old saying, "if at first," etc., this very fitly applies in learning to ride the bicycle. Naturally, one will become tired and fatigued, and for this reason it is well to make the first lesson short, say half an hour long; a lesson of this length two or three times a day, for two or three days, and the ordinary man will be able to take a short ride. The first few rides will necessarily be short, the exertion will grow less with each ride, and you will be surprised to see how simple are the points that only a few days previous seemed so difficult.

After becoming familiar in mounting and riding, the next in order is to dismount. This, to many persons, is even harder than the mounting; probably the first few dismounts will not be very graceful ones, the chances being that as you come to a standstill the machine will incline to one side, you will remove your foot from the pedal, and it will rest on the ground, after which you will draw the other foot over the frame in a rather awkward manner. This will only happen the first few times, and you need not feel discouraged because you do not dismount as gracefully as your friend who has had longer experience. I will instruct you upon only one way of dismounting, and this is the one generally followed.

When wishing to get off, slack the speed till the machine has but little motion, then, when the left pedal is at the lowest point, rest the weight of the body on this pedal, throw the leg back and over the rear wheel, and step lightly to the ground. You cannot help making a proper dismount if the above suggestions are followed. Be careful to secure your grip

on the handles, so that the machine will not fall over, and lift the right leg sufficiently high to prevent its coming in contact with the rear guard or wheel. Many riders apply the brake to bring the machine to a standstill before dismounting, though this is not general with experienced riders.

Only a few points are now necessary, which, if followed, may be of benefit to you. When going down-hill, do not pedal too swiftly as there is always more or less danger, especially to the new rider. It is always a pleasure to coast, and also rests the rider. Most machines are fitted with foot-rests on the front fork, and the rider can transfer his feet to these rests and enjoy the ride down grade. Always have the brake ready to apply at sight of any approaching danger; in fact, it is always well in descending a hill, to have the hand on the brake handle, and ready to apply the brake in an instant; but care must be used, and the brake not put on suddenly, or hard enough to bring the machine to a stop with a jerk, which might throw the rider; many riders always have the brake on lightly when descending a hill.

#### CARE OF MACHINE.

This is a matter which is thought lightly of by many owners of machines, indeed too much so for their own good. Where a machine is well cared for, it not only gives its rider better satisfaction while in use, at less expense of power and cash, but always makes a good appearance.

On returning from a ride it is advisable to devote a few minutes to the machine. Wipe all the finished parts thoroughly dry with chamois skin or soft cloth. Keep all parts of the machine, and especially the nickel parts, free from moisture, and particularly from salt water, which is injurious to nickel or enamel. If, moisture is allowed to stand for any length of time, it eventually rusts the nickel and cannot be removed, as nothing has yet been produced which will entirely remove rust; it can be prevented, but cannot be removed. Do not allow oil to stand on any of the finished parts of the machine, as it is injurious to the finish, and also to the rubber, so it should be removed as quickly as possible. Many articles are on the market for cleaning and preserving the finish; these may answer some purposes, but the oil used in their composition will in due time work an injury, so it is well to be cautious.

The bearings hold about the same relation to a bicycle as do the works to the watch, and must necessarily have some attention. They should be kept as clean as possible, and the balls, cones, and cases in good shape, and properly adjusted. It is not necessary to take the bearings apart for cleaning very frequently, ordinarily, once a season should be enough to do this. To give the bearings a particular examination, it is well, two or three times a season, to remove the ball cases, cones and balls, and rinse them thoroughly in benzine or kerosene, to remove all grit, or gum, from hardened oil. Before replacing these parts, examine them carefully, to see that they are perfect; if you find any of the balls unevenly worn or nicked, or any uneven spots in the grooves in which the balls run in the cases, they should be replaced, as they will only destroy other parts in the end, and be at a greater expense in replacing.

The chain also requires attention. It should be adjusted so that it will be neither too tight nor too loose; if too tight, it will click, run hard, and wear out the links and the sprocket wheel. If too loose, there is a loss of power, and when the power is suddenly applied, there is danger of links breaking.

The chain should be kept as free from dirt and grit as possible, by use of a small brush or cloth, and should be lubricated occasionally. A heavy oil, graphite, or a mixture of both, can be used to good advantage.

For oiling, use regular lubricating oil, or any good machine oil which will not gum up. A few drops of oil in each bearing is sufficient. If too much is used it only runs out, and should be removed to prevent injury to the finish, or catching dust.

## WHAT TO DO IN CASE OF ACCIDENTS.

Accidents to a machine on the road are of frequent occurrence, but this is not to be wondered at, when one considers the thousands of machines in use daily. Pedal shafts will become bent, even on the Safety, and many other slight repairs can be made by the rider, with only ordinary skill and ability, but for difficult repairs it is by all means best to depend on the manufacturer, or a skilled machinist. Many times a rider will become

disabled while out, and will resort to the nearest "village smithy," who will set out to repair the machine. The blacksmith may do his job in an apparently satisfactory manner, and it may hold temporarily, and oftentimes permanently, but many cases have been known where the blacksmith's work prevents the maker from restoring the machine to its original condition, except at a very great expense.

The above is not intended to injure the blacksmiths, for they are our friends, but to caution the rider to be careful, when calling for repairs, in a place where no regular repairer can be found.

To correctly straighten a bent pedal pin, it should be put in a lathe, but when this repair must be made on the road, remove the parts of the pedal, except the shaft, and leave this fastened to the crank. Then place a piece of wood under the shaft, to relieve the shock, and strike the shaft carefully in the right direction. Do not try to repair this pedal by hammering, without taking it apart.

A common occurrence is the loosening or breaking of a spoke, but it is easily made right. A tangent spoke is tightened or loosened by using a nipple-wrench, or an ordinary monkey-wrench, by turning the nipple to the right or left, as the case may require. The spoke is threaded on the felloe end, and fits into the nipple, which is also threaded, by means of which the spoke is adjusted.

To adjust a direct spoke a spoke-wrench is necessary; this should be clamped on the spoke near the hub, and turned to the right for tightening, or left, for loosening. To insert a tangent spoke, in case a new nipple also is necessary, a small portion of the tire must be loosened, in order to put in the nipple; but provided the old nipple is all right, all that is necessary is to draw the spoke through the hub and pass the threaded end into the nipple and screw up, then tie and solder at crossing, if spokes are finished in this way.

It is more difficult to insert a new direct spoke, as these are more apt to break in the hub, which often makes it necessary to drill out the broken end, though sometimes it can be loosened by gently tapping on the outside edges, and then unscrewed. If necessary to drill the broken stub out, care must be used, so not to spoil the thread. To put in the new direct spoke, loosen part of the tire, run the spoke through the hole in the felloe, and

screw the threaded end in the hub and then tighten with the spoke grip.

Tires will often come loose on the road, and it is well to carry in the tool bag a piece of tire tape, which can be wound around the rim and tire and afford temporary relief, till home or shop is reached, when the tire can be If but a small section of tire re-cemented. requires cementing, wipe off the dust with a dry cloth, and wash the surface to be cemented with benzine, then add to the cement already in the felloe, if necessary. This can be melted by passing a hot iron along the groove, or by holding a spirit lamp under the felloe, moving the flame from side to side, and being careful not to burn the tire. When the cement is melted, see that it is evenly distributed, and then place the tire in the felloe, and be careful to get it even. After this, continue heating the felloe with the lamp till the tire is hot, and you feel sure it has become set securely, then scrape off the cement, which may have oozed out at the side, and let the machine stand till the cement has become thoroughly hardened.

To cement a whole tire, place the tire on the wheel, with side to be cemented turned out; sear it slightly all around with a hot iron, in order that the cement may stick to the rubber. Remove tire, pour melted cement into felloe, and distribute it evenly; replace tire, and heat felloe underneath, as mentioned before, and then let machine stand several hours—say over night. The points to note carefully are that rim and tire must be clean, before applying cement, that the parts to be cemented be thoroughly heated to secure adhesion, that the tire be laid evenly in the rim and allowed to set until the cement is thoroughly hard.

When the wheels do not track, the chances are that the front fork or the frame are slightly sprung, and repairs of this kind should not be attempted by the ordinary rider, but the machine should be put in the hands of the skilled mechanic or repairer. He should also be given charge of the machine for buckled wheels—wheels out of shape—or wheels out of true, as this requires considerable skill. A slight buckle can be temporarily repaired on the road, but care should be taken in further use of the machine, till it has been put in good order. A buckled wheel may often be restored to shape by laying it on the ground and placing the foot on the higher part of bend in rim,

lifting with hands on lower part and then springing it back to shape. Buckled wheels are rather scarce, however, since the advent of the Safety.

Small cuts in solid rubber tires can be repaired by use of a liquid cement, which is set in the cut, then drawn together and held tight by being wound around with a piece of cloth and allowed to stand till dry. This can be removed and the tire used in a couple of hours. This can also be used on a cushion tire for a slight cut, but if the cushion rim is cut clear through to the chamber, a new tire is necessary.

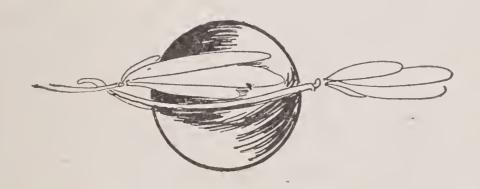
It is difficult at this time to give general instructions for repairing a pneumatic tire, as there are so many different makes, and they have been in use so short a time. Some of these tires are so difficult of repairing that the rider cannot undertake it, and if he did, the chances are that he would only make a poor job, and the tire would be practically useless. One of the greatest advantages in the Columbia pneumatic tire mentioned is the ease with which it can be repaired.

If by any chance a puncture should occur while on the road, a piece of ordinary tire

tape, carefully wound around the tire, at the injured part, will afford an effective temporary repair till home or shop is reached, where a permanent repair can be made very readily if directions are followed. Each and every maker should furnish instructions for repairing with each machine sold.

The Pope Manufacturing Company issue a small pamphlet, which contains much useful information for the cycler, and full instructions for Choice, Care, and Repair. A copy of this will interest you.

C. E. WALKER.



### THE VALUE OF OWNING A COLUMBIA.

O the majority of riders, the high-grade bicycle is a luxury. One sees so many wheels made by reputable manufacturers now-a-days, that this statement may seem rather extravagant,

but let us stop and consider when we first owned a bicycle, and in what manner we first came by it.

Perhaps there may have been some indulgent father in the case, or you may have been the favorite nephew of some rich uncle or aunt, who thought a bicycle would be a very appropriate present. You may have won your machine in a raffle, or obtained it in a hundred different ways, but the vast majority of wheelmen are obliged to earn their money, a dollar at a time, until finally the requisite amount is obtained.

What a countless number of things a young

man imbued with the true cycling spirit will deny himself for the sake of owning a wheel. He will walk where before he used to ride: the old coat is brushed up and pressed, and made to do service for another season: he gives up going to parties and his friends say he is settling down, getting a little old, and not the young fellow he used to be. But to the young man what a pleasure it is to see his little pile increase: he becomes an enthusiast on the subject of wheeling: he collects all the different catalogues, visits the different salesrooms, asks innumerable questions and finally picks out his favorite wheel. Oftentimes, when out at noon or in the morning going to work, he will go two or three blocks out of his way in order to pass the show window where his long-looked-for prize gracefully rests, to him a model of perfection. What a series of rapidly changing thoughts pass through his mind as he stands there: the long trips he will take; he will ride to the train mornings and home again at night; his summer vacation will be spent awheel. He looks at the wheel and mechanically moves his limbs, wondering if the adjustment of this bicycle would be about right for him.

At last the long coveted prize is his, and he leaves the salesroom with his machine as happy as one can well be. If it be a bit muddy outside, he lifts it up and carries it over the crossings, handling it as carefully as you would a child. His friends now understand him a little better: they can see why he did not do this and that, that required the outlay of a few dollars, and feel that the look of pride and satisfaction on the owner's face is well worth the sacrifices he has submitted himself to.

Supposing at some time he should forget to lock his machine while standing in an exposed place, and returns to find it gone. Imagine his feelings: all his efforts and endeavors of perhaps a year gone while perhaps his back was no more than turned. What shall he do? To whom shall he look? He cannot buy another one, and just now bicycling seems the dearest thing on earth. He may advertise it, and offer a reward, and should the thief be discovered pay the costs of prosecution, but no, he can ill afford this outlay. To whom shall he look? Here, as in many other cases, does the Pope Manufacturing Company step to the front, and should the stolen machine have been one of their famous "Columbias"

the owner may feel assured that everything in their power will be done to have it restored to its rightful owner. Besides using their personal endeavors to trace the wheel, this Company offers a reward of one hundred dollars for the arrest and conviction of the thief and machine returned to the rightful owner. Surely this is a magnanimous offer, freely made and something worthy of the deepest consideration of thoughtful buyers. It costs you nothing, and, in your case as in many others it may be the cause of restoring to you your bicycle. Are many machines stolen? you may ask. Visit the salesroom of the Pope Manufacturing Company and see there the bulletin boards on which are posted circulars, postals, telegrams, giving numbers and descriptions of their Columbias lately stolen. During the riding season hardly a week passes but two or three notices are received regarding stolen Columbia wheels.

A very natural question now is, are many stolen Columbias ever recovered, and what happens to the culprit?

In answering this question, let me state that the Pope Manufacturing Company have paid out several thousand dollars as rewards, and many riders have been made happy by the return of their wheels through the efforts of this company. In the city of Rochester, New York, a thief received a sentence of five years hard labor in States Prison at Auburn, New York, for stealing a Columbia machine. In Minneapolis, Washington, Hartford, and in many other cities has this punishment been meted out to law breakers in this respect. It is grand larceny to steal a bicycle and a feeling of security goes to the purchaser of every Columbia wheel.

W. K. COREY.



### ROAD RACING.

4

HE L. A. W. only controls bicycle races on the track; there is no association which controls road racing.

In the first place, it would be well to decide what distance the race is to be. If over five or ten miles a straightaway course is now preferred,

because in the list of entries you may have riders who reside out of the state, and who have never had a chance to go over the course until they are ready to start in the race; thus a straightaway course is better,

and strangers are less liable to get confused.

In picking out a course, you want the best roads that you can find, and the distances should be accurate. It is best to go over the course with a cyclometer, and have it register more miles rather than less, that no questions can be raised if records are broken.

Entries for a handicap race should close at least a week before the race, to allow proper time for investigation.

The officials of a race should be, — a referee, three judges at the finish, three time-keepers, and one starter: one clerk of the course, with assistants if necessary, one scorer with assistants if necessary, and as many checkers as are essential along the route.

The referee shall have general supervision of the race. He shall give judgments on protests received by him, shall decide all questions, or objections respecting foul riding, or offences which may be brought to his attention by the checkers, or other officials; he shall act as he may think best in cases of misconduct by attendants, and shall disqualify any competitor who may become liable to disqualification. His decision in all cases shall be final.

The judges shall decide the positions of the men at the finish. In case of a disagreement, the majority shall decide. Their decision shall also be final.

The time-keepers shall compare watches before the race is started, and shall note any

variance. The time to be taken from the flash of the pistol or the word "go," and in case of disagreement the intermediate time of the three watches shall be taken as the official time. In case two of the three watches mark the same time, that shall be the official time.

The scorer should check the men off at the start, and record the men at the finish, as given him by the judges, and the time given by the time-keepers.

The starter should, when it is reported to him by the clerk of the course that all the competitors are ready, see that the timers are notified, and before starting say, "Mount!" Then in a few seconds say, "Are you ready?" and if no reply to the contrary be given, to effect the start by the report of the pistol. Should the pistol miss fire, the start may be made by the word "Go!" The starter shall announce to the competitors the distance they are to go, and caution the men about any rules the management may have made, in regard to sidewalk riding, pace-making, etc.

The clerk of the course shall see that each of the contestants has his number either pinned or sewed on his shirt or jersey, and shall call competitors in ample time for the race.

The checkers should check the men as they pass them, and, after the race, retire with the other officials, to see if the contestants passed each checker at the different points.

#### NOTES.

It is best not to let the contestants know where the checkers are to be placed, and in this way you are sure to have the men go.over the entire route.

Whereas, on the other hand, if they knew where the checkers were stationed and there should be a short cut on the way, they would be liable to cut off the distance and still pass the checkers, who would report it all right. Checkers should be placed at various places along the route, and especially at any dangerous places.

At the finish there is always a crowd and the space should be kept clear, since many a race has been lost by not having the road-way clear; and in doing so the contestants are less liable to accidents.

It is best to have the numbers on white cotton cloth and sewed on, rather than pinned. It has occurred in several races that contestants, several miles out on a course, when

they have to come back over the same route, have had one of their friends stationed there and have had him go over the course and return to where the contestant has been resting. In an event of this kind, the first rider starts back refreshed, and comes in near the front, his friend having been marked by the checkers as all right.

Century runs, or a hundred miles in a day, seem to be very popular of late. Several clubs have been formed, having a regular badge, to which a bar is added for each hundred miles made. On a run of this kind the rider should always have had plenty to eat, as that seems to be the success of his endurance. Do not start out in the morning without your breakfast. A course over good roads should be chosen, and the distances known between different towns, or else a cyclometer on the wheel should register one hundred miles, since a good many persons take a map and figure the distance out by a scale and say they guess it is so far from here to there. Now, this is entirely wrong, for when a wheelman rides anywhere from seventyfive to eighty miles he gets very tired. Then it is that the miles count up very slowly and seem awfully long, the rider feeling sure he has gone his hundred miles.

For a large party two pace-makers should be chosen, and the wheelmen ride by twos, following the persons in front of them. Thus they do not take up all the road as they otherwise would if spread out, and plenty of room is allowed for other vehicles.

In going downhill, it would be well to have your brake well in hand, the riders about fifty feet apart, and keep in your same positions. By doing this you will avoid accidents which frequently occur by running close to your neighbor and having his step catch in your front wheel, or else having your pedal catch in the other wheel and throwing you, besides tearing out spokes and otherwise injuring the machine.

For a large party it would be well not to let the riders know where they are to be checked off. This should be done at least two or three times on the trip, and also at the places where the meals are taken.

Before starting checks should be given each rider, with his number on it, and at various places along the route roll-call should take place by calling out each number, the person corresponding to it answering by giving his name; other times calling each name and each one responding by giving his number. At the finish of the ride that day, checks should be presented to the checker.

It would be well to charge 50 cents or \$1 entrance fee, and have that amount go towards furnishing a souvenir for all who finish.



### TRAINING FOR BICYCLE RACES.

4

T is an impossibility to give rules and instructions which would be proper for every man who intends to race. Difference in temperament, ability to stand work, conditions under which the work is undertaken, and the time which can be given to the work, all preclude this.

I shall endeavor to give general instructions which can be followed, in whole or part, by any person, and will give, as nearly as possible, just the work which I would give to a man who placed himself under my charge. Beginning with the first of January, work in the gymnasium should be taken. A man should give particular attention to the upper part of the body, getting the arms, back and chest muscles in good condition. Very few riders pay any attention to this work, and it really counts for considerable in the latter part of the season's riding. A man feels

stronger after this, and he can start his road riding feeling in good condition for the work ahead.

Little or no work should be done for the legs, for they will get all they should have later, and it is an undisputed fact that the legs need almost absolute rest out of the riding season. No set of muscles can be used constantly without becoming stale. If a man has no gymnasium to go to, he can use, in his own home, appliances costing very little, which will accomplish all he needs. A pair of dumbbells, weighing about two pounds each, can be used for a variety of exercises, and these exercises (for the upper body) can be found in any number of books on the subject, which can be purchased very cheaply. A set of chestweights, with rowing attachment, are really the best things to have, but in case they cannot be procured, one can rig up a pair of common window-pulleys with weights, which will give the same work. This, for preparatory work, and too much importance cannot be placed on it.

About April first, the man is ready for road work, and should start in by riding about five miles twice per day, at an easy gait, for about

two weeks. Don't start in too hard, and don't indulge in any spurting. The rest of this month can be spent in riding ten miles in the morning, at a good stiff pace, no spurt at the end, and, in the afternoon, three to five miles, at a good pace, and finishing the last half mile strong. The man is now ready for track work, and here is where his real work begins.

Races have now come to the point where they are simply a series of spurts on the finish. At the same time, no man will find that he has wasted his time if he will go through a preparation for hard riding, as well as developing his "spurt." It will stand him in good stead in a long race, and will certainly help him when he comes to want to ride in two or three races in one day. Staying power is a quality much to be desired by any rider.

I will suppose that a man begins his racing about May 30. For the first two weeks of his track work, he can ride ten miles in the morning at a hard even pace, and in the afternoon five miles at an ordinary pace, finishing up with a spurt for the last three hundred yards. This may look like too much hard work for any rider to undertake, but I can

assure any man that the results will fully repay him for the labor. He will be in good riding form, and in good condition for any pace which may be set for him by his competitors in any race.

The last two weeks in May can be used for lighter work, and for developing the finish to his races. Working twice a day, in the morning, he can ride two or three miles at a stiff pace, and on some days in the afternoon he can try two or three "quarters," then trying his speed at one-half or a mile, never riding a trial at more than one distance (except the "quarter"), on one afternoon. This work, kept up until two days before his first race, will bring any man to the start in condition to win, or give his competitors a good race, at any rate.

All the foregoing is for men who can give time to the work. Now, for men who are perhaps engaged so that they can give only the time for a month before racing. No man should go into a race who has not had a month's preparation of some sort. I will suppose that he has been riding on the road during the early season, and now wishes to try his hand in a track race.

His road work has put him in fair condition, and he probably is obliged to do his work at night. What such a man needs is "speed." Such a man should keep his wheel at the track, where he intends to train, and not use it on other occasions. If he has formerly used his wheel as a means of transportation to and from his work, let him now give it up. Riding up grades, and the jarring consequent to road riding, prevents the developing of fast riding. For two weeks let him ride about three to five miles, at a hard pace. This will familiarize him with the constant and steady work of track riding, which is far different from riding on the road, where he can rest on grades. If he feels like it, let him finish these rides with a spurt of one-eighth of a mile, not longer. The last two weeks he can use in riding two miles, at a hard pace, and spurting two-eighths on one night, three-quarters the next night, riding a mile trial the next, and then spurting the fourth night, alternating the hard with the light work.

As I previously stated, it is impossible for any one to give the correct work to be followed by several persons, and I have only endeavored to give general work, which, if followed, will do no harm to any man, and will certainly improve his riding. I think the majority of the present riders pay too little attention to their staying powers early in the season, and that is the time when it should be developed. A few general suggestions may not be out of place.

About the bathing, a man in training (or any man for that matter) should never get into water. It is weakening. If any person will try the following, they will agree with me that it is the best method of bathing. On rising, take a sponge and after having dipped it in cool water, squeeze it out thoroughly. With frequent drippings and squeezings, wipe the entire surface of the body, and then dry with a rough towel, used not too vigorously. After riding, wait till thoroughly dry, and then go through the same process of bathing, after which have a rub down with pure alcohol, in which a little glycerine has been placed. At night, go through the same bathing process, but "do not" take the rub down. majority of persons are kept awake by a rub down at night, and very little benefit is derived from it unless taken just after exercise.

A man should never ride himself out at the

start of the season, and, at any time, should let up on his work if he is not feeling well. Don't loaf while working. Do your work from start to finish and don't stop. Do as little walking as possible, and when you have taken up track riding, keep off the road. Eat any digestible food which you have a taste for, and drink any reasonable amount of good water. Let stimulants entirely alone, and never touch tobacco. Never work the day before or on the day of a race.

H. S. Cornish.



### HOLMES & CO.,

MANUFACTURERS.

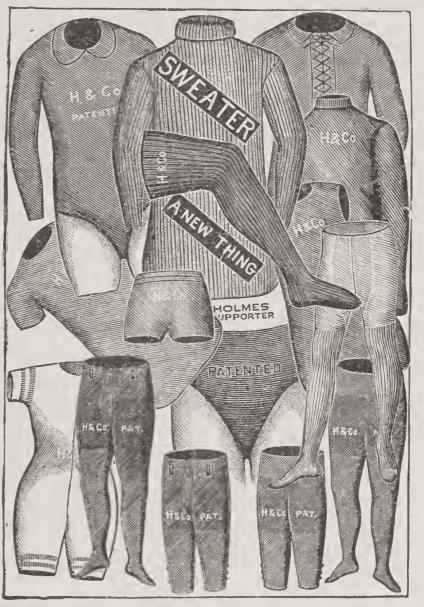
# JERSEY-FITTING GARMENTS.

Bicyele,

Gymnasium,
Athletic and
Cadies' Union
Undergarments.
Cadies' & Gents'
Bathing Suits.
Stockings.

Each garment in above cut we make in three different qualities.

Send Stamp for Catalogue and Price List.





PATENTED APRIL 20, 1891.

### Lady Bicycle Riders

Wear the Equestrian Trousers for "Comfort and Health," and what you like over them to make you fashionable.

Before purchasing, see Holmes' & Co.'s Patent, represented in the preceding cut, then you will buy no other.

109 Kingston St., BOSTON, MASS.

## THE NEW ENGLAND MAGAZINE.

This is that Illustrated Magazine, that Literary Magazine, that has been attracting so much attention lately. The Only One published in Boston.

It contains *Literary Articles* by the best writers on Live American Topics. Historical Matters, interesting but not large enough to fill a book, here find expression in a permanent form.

Articles which can be are illustrated by careful artists.

Every number contains about One Ifundred Illustrations.

### A FEW OF THE SPECIALTIES FOR 1892.

Phillips Brooks: An authentic and complete sketch of his life. Illustrated.

Howells's Boston: Places made famous by Howells. Illustrated.

The Future of Electricity: By Prof. Elihu Thomson the great inventor.

His Own City: By Capt. Charles King.

Corot: His Life and Character: Illustrated by his paintings.

Wellesley College and Vassar College: Both will be illustrated.

Chicago as an Art Centre: Illustrated.

Stories a Strong Feature.

The above show the character of the magazine, which will continue to present articles of strong historic interest, largely illustrated. Send for our six-page prospectus.

New subscribers for the year 1892, paying \$3.00 in advance, will receive the November and December number of 1891, free.

Send Ten Cents to the office for a Sampte Copy,

PUBLISHED AT 86 FEDERAL STREET, BOSTON.

#### RECORDS.

of the Safety over the Ordinary more marked than in the racing of last season. Two years ago, in making up a table of records, Ordinary and Safety each held an equal place and on both had world's records been made. Below is given a table of track records. All were made on Safety bicycles, and a large part, if not all,

## COMPARATIVE AMERICAN AND ENGLISH AMATUER TRACK RECORDS.

on pneumatic tired machines.

JANUARY 1st, 1892.

DISTANCE.		AMERICAN.			English				
[flying start.]									
4 mile,	A. A. Zimmerman,	$:29\frac{4}{5}$	A. T	. Mole,	$:30\frac{3}{5}$				
$\frac{1}{4}$ mile,	H. C. Tyler,	$:33\frac{1}{5}$	F. G.	Brady,	:33 ‡				
1 "	H. C. Tyler,	1:6	F. T.	Fletcher,	$1:7 \frac{2}{5}$				
$\frac{3}{k}$	W. W. Windle,	1:41	F. J.	Osmond,	1:42				
1 "	W. W. Windle,	2:15	F. J.	Osmond,	2:16				
2 "	G. F. Taylor,	$4:48\frac{4}{5}$	66	66	$4:50\frac{3}{5}$				
3 "	A. A. Zimmerman,	$7:49\frac{3}{5}$	66	"	$7:17\frac{2}{5}$				
4 "	66 66	10:27	46	66	$9:47\frac{1}{5}$				
5 "	"	$12:53\frac{4}{5}$	66	66	$12:16\frac{2}{5}$				
10 "	C. W. Dorntge,	$26:46\frac{3}{5}$	66	66	$24:55\frac{1}{5}$				
20 "	66 66	$53:56\frac{2}{5}$	66	66	$50:22\frac{4}{5}$				

It is interesting to note that all these records from 1-4 mile to 2 miles inclusive are held by American riders, while the records after two miles belong to Englishmen. American riders leave long distance competitions to professionals, while foreign bicyclists contest in two, three and sometimes five mile trials. Englishmen do not so closely draw or so rigidly adhere to the amateur rules as we do, which may perhaps account for this difference.

R. L. Ede, England, holds the world's 25 mile amateur track record, time, 1 h. 5 min. 55 2-5 sec. C. L. Newland, also of England, holds all track records from 64 to 100 miles. His time for 100 miles was 5 h. 30 min. 12 2-5 sec.

There is another class of records held by Englishmen exclusively which are interesting. They are as follows:

1	hour,	F. J. Osmond,	23	miles,	1260	rods.
2	hours,	R. L. Ede,	44	66	400	6.6
3	66	<b>66</b>	63	66	49	66
4	66	C. L. Newland,	75	66	210	66
5	66	66	91	66	535	66
24	66	M. A. Holbein,	361	66	1320	66

The one mile track record has always been the record of records and the present one of 2.15 was made by Windle on a Columbia rac-

ing Safety, at Springfield, Sept. 17, 1891. As this record is to track racing, so is the 25 mile record to the road. This record is held by an American rider, Hoyland Smith, who made the remarkable time of 1 h., 19 min. 13 sec., also on a Columbia, in the Boston Athletic Ass'n Road Race of this year. Road records for 50 and 100 miles are held by Englishmen as follows:

50 miles, S. D. Begbee, 2 h. 35 min. 16 sec. 100 "M. A. Holbein, 6 h. 5 min. 26 sec.

Various other records might be given, but these are the principal and most interesting ones. During next season many of these will be lowered, although the records for short distances are fast coming down to a point where to clip off a fraction of a second is to gain for the man who does so the admiration of all lovers of true sport.



### LADIES' RIDING.

HE young women of Detroit have not been slow to realize the benefits of cycling. It is especially efficacious in bringing into motion the muscles unused in walking, strengthening every sinew of the body. Ask any woman cyclist how she felt when she dismounted her wheel after her first long ride, and she will tell you that she went "all to pieces," so to speak. And why? Because the muscles that had lain so long dormant, year after year—the muscles that are not brought into action when walking, had been put to use, and the result was apparent. After two or three rides, the tired, collapsed feeling, changes into one of exhiliration. Just look at the young women who ride the wheel regularly and see if they are not the healthiest, brightest faced women you meet!

Said a well known Detroit physician, "Any exercise that is taken in the open air is beneficial, though there are some few pleasurable pastimes that are too violent for women.

Horse-back riding might be preferred by those who are too timid to venture on the bicycle, since there constantly arises the fear of falling while learning to ride the wheel, but that acquired, and I understand that that is a question of a few days' practice, I believe the preference would be given to the machine. I certainly think it is the most healthful of all forms of out-door exercise."

One young woman who is a rider of the present year, though, from her frequent mounts, one of experience, looks at the wheel from an economical standpoint. "Why," said she, "I don't get time to wear good clothes since I have been riding a wheel. I put on my cycling gown when I rise in the morning, and mount the wheel so often during the day, and frequently in the evening when there are a dozen or more to go in line, that unless it is for the theatre, a reception, or a caller, I find my wheel dress the only one I have an opportunity to wear, and as for hats - well you know how enormously high a woman's millinery bill can run — why there's where I make the greatest saving. One or two small caps, the yachting kind, with one or two for dress occasions will carry me through the entire year."

Grace E. Denning, an authority on cycling, says in Outing that the lady cyclist passes through three stages—the daring, the desponding and the doing. The last arrives when in tears and mistrust she suddenly realizes that she is sitting firm, pedaling smoothly, steering soberly and going alone. Ah! the triumph of that moment.

Cycling for women has come to stay. It is no use for doctor, lawyer, parson or chief to say "Thou shalt not" to the woman of to-day, while her conscience approves and her experience proves that her own way is right.

In days gone by, one-half the opposition already conquered would have been fatal to the exercise, and the silent steed would have stood "unused, unhonored and unsung." But without defying or disputing, or anything but determinedly doing, the woman of to-day sweeps aside the cobwebs of prejudice, with highest self-respect and gentle dignity, cleanses the would-be smirch of unfemininity, and goes on her narrow way rejoicing.

These three stages have happily been passed over by upwards of one hundred and fifty Detroit women. An increase over the season of 1890 of one hundred and forty. Nearly

every street in the city, has its women cyclers. Jefferson avenue residents who pass the summer at Grosse Pointe have taken to the wheel with a vengeance, and it has been no uncommon practice this summer for the ladies to ride seven or eight miles of an evening, to meet their husbands, and bowl back with them, better in health and better in spirits for their few hours' spin.



#### DRESS.

N no other occasion is it more important for a woman to look her best than when mounted on a bicycle.

No woman is so young, beautiful or graceful that she can afford to lose sight of this fact.

The question of a becoming, suitable and comfortable dress for wheeling, is a very important one, one which has never been satisfactorily answered.

Very many interesting articles have been written on the subject, and many have been the attempts of dressmakers and those interested in dress reform to invent a cycling dress that would become popular, but although something may be said in favor of nearly all the costumes devised, their unsuitableness in many respects, point to an utter ignorance on the part of their inventors of a practical knowledge of wheeling, or the requirements of a dress for that purpose.

For instance, we are asked by a prominent dress reformer to wear a dress seven yards in width the weight of which even though "divided" would prove an insufferable objection.

The construction of a costume that would be universally becoming seems almost an impossibility. The natty suit which the trim built little woman may wear, with a suggestion of coquettishness about both woman and dress, would only be ridiculous on a larger woman, with a superabundance of flesh or bony structure, either of which need judicious concealment. The Tam O'Shanter which looks so chic and charming on the head of a lassie of sixteen would when worn by a more mature woman, whose hair may be growing a little thin at the temples, only serve to accentuate the fact that her age is nearer forty than twenty.

But there are some points in the dress of a wheel woman which are applicable to all, one which is neatness in every detail. A hat set carelessly on one side, a vagrant lock of hair not properly fastened, a shoe string untied, a missing button from bodice, shoe or glove, lends to the whole person a most undesirable appearance. The rider should see to it that there is no loose bit of braid or hem, to catch

in the pedals, and mayhap bring confusion to herself and destruction to her attire. She should put pins enough in her hair and hat to keep them straight and beware of anything in the shape of a white skirt, for it is often that the unexpected happens especially to beginners, and the nearer one approaches an harmonious whole on such occasions the better.

A mistake that many wheel women make is in thinking anything good enough while riding. A shabby half worn street suit or perhaps a combination of two in different stages of dilapidation, surmounted by the worst looking piece of head gear in a three years' collec-. tion is considered about right. Looking from the stand-point of a woman who has never ridden, one does not wonder at the exclamation, "Well, I never want to ride a wheel if I have got to look like that." Don't think these things won't be noticed, everything from the crown of the head to the sole of the foot of the woman who rides the wheel is noticed, and the glimpse of a worn ill-fitting shoe or a wrinkled stocking has done more to discourage cycling among women than all the prating of Mrs. Grundy, about it being too masculine a sport, too hard work and all other seemingly

91

feasible reasons brought forward by that antiquated dame.

Of course it is much easier to say, Don't wear this or that than it is to suggest the proper thing, for the ideal costume is yet to be invented. The hat question is a different one and should be suited to the wearer's own individuality, but whatever is worn be it sailor hat, jockey, turban, toque or Tam, do not let it be a man's hat. A salvation army bonnet is far more becoming to many faces. Light colored shoes should not be worn unless one wishes to call attention to a very small and pretty foot.

Anything that savors of finery should be rigidly excluded from the wheelwoman's toilet. The nearer she approaches "tailor made" the better she will look when mounted on the wheel.

Every good quality cannot be combined in one suit. A material that may seem just the thing to wear on a hot summer's day will be found to be too much of a temptation for the vagrant breeze waiting around the corner to transform one's skirts into a veritable balloon. For all-around a skirt of dark cloth is best, made neither too long nor too short (it is so hard to get a skirt short and scant enough for ease and comfort on the wheel) yet having

sufficient length and breadth not to be remarkable when the rider dismounts. The skirt should be about three yards in width and short enough to escape the ground when standing. It should be lined in front at least with dark cambric to prevent its catching at the knees when the wheel is in motion.

A shirt waist made of wash silk, cambric or outing cloth is very suitable and pretty for summer wear but should always be supplemented by a jacket made of the same material as the skirt to guard against the sudden changes of temperature to which we are always liable in this climate, and to be put on when one dismounts after a brisk run when there may be danger of a chill.

The Holmes' combination undergarment seems to be about the best thing of that kind to be worn either in warm or cool weather. One underskirt is sufficient, made divided of light weight dark flannel matching in color the outer skirt. Cashmere hose, same color, shoes low, easy but well fitting, and loose gauntlet gloves. A soft white silk handkerchief folded about the neck inside the habit waist where no shirt waist is worn, adds much to the appearance of neatness, which is so desirable.

One of the prettiest costumes I ever saw was made of bottle green face cloth, the skirt severely plain, habit bodice double breasted, buttoned with small lasting buttons set very close, bound with narrow black silk braid. Sleeves large at the top buttoning close at the wrist, tan gauntlet gloves: dark green felt hat turned up close at the sides, no trimming save binding and band of black. It was a pleasure to look at the wearer as she rode past, sitting on her perfectly adjusted wheel as if she were a part of it (and no woman can look well on a wheel unless it is adjusted for her personally) the roses in her cheeks and the knot of crimson at her throat lending a touch of brightness that completed a most charming dissolving view.

A woman who through carelessness or indifference in attire fails to make herself an attractive object when riding a wheel loses many opportunities for missionary work among women who might be induced to try cycling for themselves, and brings ridicule not only upon herself but upon a most delightful form of exercise and recreation.

MARY SARGENT HOPKINS.

## THE EFFECTS OF CYCLING ON THE HEALTH.

O know that all classes and conditions of men ride bicycles is conclusive proof that the exercise is beneficial. Clergymen, doctors, lawyers, bankers, professors, are all universal in praise

of the bicycle as a health restorative.

Perhaps the best evidence is the testimony of the doctors:

"To my mind cycling, as an exercise of use to the physician in treating his patients, both in the quality and quantity it gives, combines physical exercise and mental and nervous exercise as does no other form of outdoor exercise, and this without a single injurious quality. The rider of a wheel takes exercise in the most even, steady way I know of, and never does he injure his general system when riding." — Dr. T. N. Gray.

"Any exercise that brings in play the great-

est number of muscles and exercises them evenly is the best to take. This is found in cycling; no one muscle or set of muscles is overtaxed in riding. Also it takes the cycler out of doors, where fresh air and plenty of it can be breathed; it gives him or her a change of scene; the change of landscape adds pleasure to a ride, and before the rider knows it he is wheeling along enjoying the country, while his muscles are getting the benefit of the ride. Weakly boys and girls grow strong while riding a wheel."—Dr. F. A. Kinch, Jr.

"'Mount me,' the cycle of the churchman cries to the overworked clergyman, 'get away from the haunts of men; speed on by the side of the river; breathe the fresh air of heaven. You will go without fatigue; you will leave your cares behind. Have you rheumatism or gout? The cycle cures them. Are you despondent? The cycle will restore your mental elasticity. Do you think exercise unscriptural or unbecoming? The New Testament says that bodily exercise profiteth, though only a little incomparison with spiritual exercise. Take the little and be satisfied and refreshed."— The London Churchman.

#### ETIQUETTE OF THE ROAD.

T is a courtesy of the road to turn out more than the law requires, to dismount rather than to force out a loaded team, to avoid rid-

ing at and through a herd of live animals driven on the road; also to speak or sound a whistle when approaching a street-crossing, or passing by walkers from behind, and sometimes when approaching a carriage to give the driver seasonable notice of approach. It is polite to use more care when meeting or passing ladies; and if several be riding bicycles together, and meet a lady on horse-back, if the horse or the lady appears at all disturbed it is courteous for one to dismount, and lead the horse by. Indeed, a thousand courtesies of the road will suggest themselves to the careful rider and will be obeyed.

A bicycler should not ride by a horse — unless known, or in a city, or attached to a heavy

load — from behind without speaking, and should give him as wide a berth as convenient, and should not close in immediately in front of him. The voice is the great calmer: where a bell or a whistle might startle or alarm, a word or two will quiet and reassure. So, in approaching a horse and carriage from an opposite direction a word from the bicycler will usually save all misunderstanding. There is no doubt that nine-tenths of all the nervousness of horses, and the accidents once in a while heard of, charged to bicyclers, is due to the negligence and stupidity of their drivers.

It pays to be courteous to the policeman, and eke to the intoxicated traveler on the same road, but not too familiar with either. This part of the subject has been pursued far enough, however, to be suggestive; and, when all summed up, it only amounts to this, that a bicycler should be, on the road, as everywhere else, a gentleman.

As of interest in connection with this chapter, I give here the road rules adopted and put forth by the Bicycle Union—see Foreign Summary—last summer as

## RECOMMENDATIONS IN REGARD TO ROAD RACING.

- 1. It is desirable that a rider should at all times keep to the right-hand side of the road, even if no vehicle be in sight; and riding on the foot-way should never be resorted to. The rules of the road should be strictly adhered to: i. e., in meeting any vehicle or rider, always keep to the right; in overtaking anything which is going in the same direction as the rider pass to the left; but on meeting or passing a led horse take that side of the road on which the man is who is leading the animal.
- 2. Under no circumstances should a rider pass on the wrong side of a vehicle, as, in the event of an accident he thereby renders himself liable for damages.
- 3. Before overtaking any passenger on the road, a signal should be given, and whilst at a sufficient distance to allow such passenger time to look around before the rider passes.
- 4. On no account pass between two riders when overtaking them; riders, upon hearing a signal from any man wishing to pass, should take close order to the right, and, if the road be narrow, take order in single file.

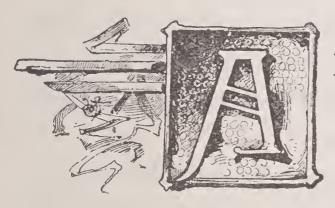
- 5. On forming single from double file, the left-hand man should fall to the rear of his companion.
- 6. In turning a corner the rider should moderate his pace, and should give a signal unless he can see a sufficient distance ahead to be assured that no vehicle is near, and that no foot-passenger is crossing or about to cross.
- 7. In turning a corner care should be taken to leave sufficient room for any vehicle to pass on its own side, as some of the drivers are particularly fond of swinging round a corner at a fast pace.
- 8. Foot-passengers on the road should not be needlessly shouted at, but should be courte-ously warned, and be given a wide berth, especially at crossings.
- 9. Care should be taken by the bicyclist not to startle any horse by passing at a high rate of speed; and upon meeting one which shows signs of restiveness, a dismount should invariably be made if requested by the driver, and in as quiet a manner as possible; it is, however, frequently desirable to ride slowly by, speaking to the horse, as a sudden dismount might frighten the animal.
  - 10. The ground in front of a horse should

not be taken until the bicyclist is at least ten yards ahead.

- 11. In company riding, a the leader on passing any one, should announce that others are following. b The leader should, at all times, give sufficient notice to allow those in the rear to slacken speed, before easing up himself. c When descending a hill, the machine should be kept thoroughly under control, and riders should not rush past those preceding them, with feet off the pedals.
- 12. For night riders, a lamp should be used to signify to other passengers the whereabouts of the bicyclist; and in frequented thoroughfares warning should be given by bell, or in some noticeable manner of his otherwise noiseless approach.
- 13. Two or more riders passing a carriage should both pass on the same side.
- 14. When riding with ladies always let them go ahead in coasting.



#### RIGHTS OF WAY.



BICYCLE is a vehicle or carriage and so decided by the authorities: therefore, a bicycle has every

privilege and is amenable to every law that a carriage or vehicle is.

- 2. Drivers have no exclusive rights in the roads as against travellers by any other mode.
- 3. The supreme law of the road is: Thou shalt use it so as to interfere as little as possible with the equal right of any other person to use it at the same time; and thou shalt be reasonably careful that no one suffer injury thereon by act or neglect of thine.
- 4. To turn out to the right is a statute regulation everywhere in the United States.
- 5. A bicycler is amenable for danger if, through his negligence or wrong doing, any-

one is injured, — the same as if by any other carriage.

- 6. Anyone who injures a bicycler or his machine, wantonly, mischievously or maliciously, is a trespasser and liable *criminally* and civilly.
- 7. Ordinances: Every city or large town has special rules for governing their own community; a great many of these are practically the same in any city, as
- (a) Regulation as regards speed, generally understood not to be greater than five to eight miles an hour within the city's business section.
  - (b) No riding on the sidewalks.
- (c) In some cities all kinds of carriages and vehicles, except baby carriages, are prohibited in the Commons or Public Parks.

It would be well for every wheelman, when in a strange city or town, if he intends riding much, to look up the ordinances, as a great many places have special rules pertaining to certain features perhaps not necessary anywhere else.

8. A person has a right to ride on the sidewalk if

- (a) There is so much travel on the street as to make it impassable.
- (b) Repairs are being made, rendering it impassable.
- (c) The streets are impassable because of mud, or any surface of danger to bicyclers.
- 9. A person has a right to ride on private property if the street and sidewalks are impassable for reasons as described in preceding section.
- 10. Bells by day and lanterns at night are almost universally required in the ordinances of the cities and towns, and in the majority of places strictly enforced.



## IT IS NOT A DREAM.— A BICYCLING SKETCH.

HEN the air grows keen, when the roads get as rough as the bark of an old tree, when the clouds sink low, with that dull and threatening tinge that

even the gilding gleam of the sun's reflection at their edges cannot lighten, what can the wheelman do? It is winter. The snow flies, the sleet cuts like steel teeth. It is then that he puts his feet on the mantel-piece and in his mind skims the earth on his wheel, and tells Polly about it.

Winter riding is not pleasant, in spite of the assertions to the contrary of some that must be thinking of the fragrant and sunny South, where the bicyclist has the year on his string and may play it and do with it as he pleases. But to us of the North, when the heavy sky comes down and covers us with its chill, winter riding is not so pleasant. There are, I believe,

"reformed" cyclists who have written "confessions" in which they tell us who are not reformed that when under the best conditions they have seemed to be gliding smoothly and with little effort, every joint has been rattling and every tooth leaping in its socket. I think that unless the "reformed" were telling lies they had been experimenting with winter riding, when the roads are as hard as the foundations of the earth and rough as the corduroy of a Southern swamp. It is plain prose this winter riding, and its grammar and rhetoric will not bear criticism. It is better to light the fire and your pipe, put your feet on the mantelpiece and travel the summer roads in a mental vision. In the curling smoke you may see the summer adventures and hear the summer winds.

Then we can dream about the time when the cyclist with loving care wheels the machine through the alley and out of the front gate, with a wicked wish that some one might be envying him his good luck in possessing such a treasure. He is not conceited nor self-conscious beyond the majority of his fellows, but—you remember the beginning of a certain rider's career, when he tried to seem bold, while his heart was making a lump in his throat with

fear of a disaster and his hands grasped the vulcanite with frantic clutch. But that passes. The time always comes when the wheelman is like that classic woodchuck that sat under the tree where "he cared for nobody and nobody cared for he." Then cheerfully he rides with holes in his knickerbockers, a hat down over his ears and shoes that have "seen better days." In spite of — well, of Polly's warning that he is steering straight for a rag bag he goes with his wheel and is happy.

From the darkened window at midnight he peers to scan the sky and to ask, What of the night? He sets the alarm clock at an unearthly hour and never complains of its clangor. In the tender light of the rising sun he creeps down stairs, avoiding that squeaking board and that snapping step. He has no desire to hear: "Good gracious. Are you after that foolishness again?" So he locks the back door with superhuman stillness, and is free. The perverse gate bangs with a concussion that must shake the house: a glance at an upper window shows a ghostly figure, but there too late to do any harm. The wheelman is out. He is mounted. He is gone.

Says the gamekeeper in the delightful book

which Richard Jeffries has called "The Game-keeper at home:" "It's indoors, sir, as kills half the people: there isn't anything like fresh air and the smell of the woods. The hedges and the grass is as sweet as sugar after a shower." Bless the gamekeeper. He has found the note to which the wheelman thrills, the vibration of sympathy that stirs him.

This cycling is said to be dangerous too. Yet it is seldom so to one's anatomy, for an occassional "header" will do that good by toughening it. A bicyclist can never be a "mollycoddle" and therein should he felicitate himself. A fool can never ride a bicycle. Every rider knows that. The wheelman may be pale, and have furrows between his eyebrows, and a deep line on each side of his mouth, marks which he will outgrow, because it's indoors, sir, that has half killed him before he has won his machine. He has dreamed of it, worked for it, devoured it with his hungry eyes — and now he has it, but he has, too, a pallid face and some gray hairs in his moustache. But he in no way cares for these things. Just now he is like that woodchuck that sat under the tree.

Yet he suspects that in escaping an imagin-

ary danger he has run upon a real one, for of the wheel he never gets enough until he is ready to fall off through sheer exhaustion. That is the dangerous attribute of the delightful companion, and it is on this point that its enemies so loudly dilate, since in their opinion the happy owner is in danger of doing too much through the fascination of it all. Then he himself wakes to the fact, and is compelled to care for himself and for the wheel, and it is this judicious combination of recklessness and of careful treatment that lengthens the life of each.

So the bicycle, through the very weakness that its enemies make so prominent, blesses him that rides it. Out of doors it takes him, into the open it takes him. It gives him purity to breathe, and pure things to see, and sweet things to think, and adventures to dream about when the winter shuts him in, and pathetic little pictures to put into words for his friends. It shows him the poetry of life, it lays bare for him the longings of the small boy's heart and the timid wishes of the little maid that he is leading by the hand along the country road. The wheelman sees the tenderness of life, for he sweeps past so swiftly that

the unconscious performers have no time to replace their masks. It is the instantaneous view that he receives and treasures. Yet sometimes the rain rains on him, and the mud splashes him between the shoulders. The "road hog" curses him and the wayside brute calls out the dog. He rattles over a tin can and cuts his tire; the wheel springs a stick into the air that perversely falls between the spokes and scrapes off some of the glittering enamel. takes a header. He says a bad word or two and is ashamed of himself. But it is all the same in the end: the mishaps are forgotten, the happiness remains, and the wheelman's summer life is worth living, and his winter's pleasure is in living the summer over again.

It is, after all, the point of view that gives the picture its charm. The artist selects it with care, and has the disadvantage of an immovable scene. The wheelman does better. His picture is a panorama. It seems to advance: it is brought to him in its natural size and alive: it is at times still life, yet it is as often full of activity. It is his point of view which changes and moves and makes his scenes so delightful.

Nothing comes amiss to him. He accepts

all that is offered, from the approving smile of the pretty girl to the sour looks and the worse then sour words of the country boor. The wheelman's world as he rides is a promiscuous one, but his compensation is that he is out of doors. "There is nothing like fresh air and the smell of the woods. The hedges and the grass are as sweet as sugar after a shower." It is the perfume and the delight of the byways and of the lanes: of even the dusty roads and of the weary hills: of the placid streams and the summer sea: of the daylight and the starlight: it is out of doors, out of doors, out of doors. The warm sunshine which enwraps him, the spicy breezes that come sweeping to him over the fields and the meadows, and the rippling waters that swirl under the planks as he and his wheel rumble across the bridges, are all for him. It is his motion and the movement of the things about him that are so stirring to his blood and so stimulating to his mind, and, best of all, so exhilarating to his body. I sing the bicycle and the man that from the shores of city gutters leaps to the saddle with wordless glee because the toils of the day are done and he has the world to roam in, while its thoughtless dwellers may forget him if they will, as he for a time is willing to forget them.

The wheelman is a different being in the saddle of his obedient machine from what he is as he trudges along the city's dirty streets. On the bicycle he flies, he sings, he shouts till the country people look from their windows to see a madman rush by.

"No, no, Polly. I have not yet talked enough. Put that cushion under my head, won't you, Polly dear?" With my feet on the mantel-piece I sit on my shoulderblades. "The cushion, Polly, please."

Polly has gone. It doesn't matter: now I can put on another hickory stick. The rain dashes against the glass. A handful of hail tinkles on the panes. The wind moans in the chimney throat. It is winter, but the bicyclist can ride in a summer memory. It is dark, but he can ride in a summer light that never can grow dull nor dim. With his blood leaping through every vein, throbbing fast and throbbing faster with every turn of the wheel and tingeing his pale cheeks, he rides. Every muscle plays sure and swift, and obeys the command of the happy brain with not a moment's hesitation or a moment's reluctance. What more

could he ask? Let the sleet beat on the slates if it will — who cares?

Although the bicycle is becoming so common a means of progression it is not yet so familiar in country places as to be seen without some emotion. When riding into the far country on a summer day it is a common experience to hear a voice, the voice of the small boy especially, cry as the wheel skims silently by the farm-yard gate, "There goes a bicycle: look, look;" and an answering "Where?" in a deeper but no less interested a tone. To the small boy it is ever a blissful sight. With him the thought of possessing a bicycle is the acme of earthly delight. I once told a friend that with a bicycle and a pleasant word the "vicious animal" as Plato called him, could be tamed in a moment and converted into a faithful ally. He so doubted it that he resolved to make the experiment, and did so, but with the essential requisite of success omitted. He made the trial from a back seat of a carriage. "Well, my little man," he said to the bare-footed urchin trudging along the sandy road, "how do you do to-day?" "Just as I durned please," came through the summer air in a tone that ended all further conversation.

That greeting was too condescending. "Hello. How-de-do? How's everything today?" would have come nearer touching the small boy's heart, and with a sight of the delectable bicycle the change in that heart would have been complete. A buggy can have no softening effect. Never but once have I failed in an experiment on a country boy with the bicycle, and this wicked fellow's reply to my greeting from the saddle was: "Yah, you spider-legged, curly-headed monkey." An answer that filled me with delight because it was so accurate. With the small boy of the city street failure is pretty certain, for he seems to belong to a different species from him of the country. When I had these experiments on hand, I once spoke not to a certain city specimen but touched the visor of my cap with a cordial gesture. What was my dismay to hear: "O Jimmy, see the old sport!"

Next to the pleasure of making these experiments on the small boy, perhaps the greatest enjoyment for the wheelman riding alone is to overtake a carriage and its occupants that are quietly jogging over the road, to pedal along with them for a short time to show them that you could if you would, and then do it. With

a dash pass by, and leave the carriage behind.

Nothing seems so to surprise the average driver as to have this experience. It increases his appreciation of the bicycle, and enlarges his mind by giving him something above potatoes to think about and to describe when he gets home. It is not a rare thing to be challenged to a race by a driver who has the confidence of his convictions, and to the wheelman there can scarcely be taste of greater delight than to let out with one's best muscles and to beat that confident man.

Although the bicyclist may be working for all that his muscles are worth, and the machine responding with all its good will, the horse may gain the advantage, yet the wheelman has the excuse; "Of course you couldn't expect me to beat you on such a road as this." The road is always open to condemnation, and usually deserves it. But this little experience in racing with the sole object of doing something that he seems not to think of intending to do, is one of the good things in the life of the wheelman who rides alone into the country. It may be that if he opened his mouth he would pant like a thirsty dog, and it may be only by the greatest effort that he pretends to

be enjoying the necessity of panting through his nostrils; streams may be trickling down his spinal column, and his legs may be about ready to stop from utter inability to move, yet with a single spurt he may beat that horse, and then it will be time to dismount to oil the machine, and to pretend that his efforts have disrupted some of his buttons.

All this, to make the fun complete, should be done without a single glance of recognition toward the carriage or its occupants. You can see from the corner of your eyes that you are the victor, and refusing to make a sign or to show that you have been conscious of the struggle adds to the bliss of the moment and increases the astonishment of the carriage folk. "Good gracious. If he did that without trying, what would he have done if he had really raced with us?"

But perhaps in this sport the very acme of delicious experience comes when the wheelman can overtake a staid old nag driven by a woman. She should be alone. Then as he comes quietly up behind the outfit of buggy and old horse, and countrywoman with an ambition, the sport begins, and if the bicyclist can keep his seat, notwithstanding his inward

laughter, he will have a joyous moment or two. To look at her, to appear to notice her, is to break the charm and disclose the rider's purpose. Keep on the power or gradually increase it, and out of the sides of your eyes you will see the woman's arms begin to tremble. She separates the lines even wider apart than usual; she leans forward and looks at the apparently unconscious wheelman; she slips forward to the edge of the seat, and you can see her hands trembling and the ribbons on her bonnet quivering in anxiety. She slaps the unhappy horse with the reins, and gets pale, and flushes and grows pale again. The old nag is doing his best; now is the time, wicked wheelman: let yourself out! Aha, she is a dozen yards in the rear, and as you pass, apparently without effort, you hear her say:

"Oh, pshaw! them bicycles!"

Here Polly gave the fire a whack with the poker.

"Do you mean to say that that is one of the abominable things that you do when you are riding? You should be ashamed of yourself."

"No, Polly, never, never. A polite wheelman would never do an obnoxious thing like that. It is only those depraved fellows of the

baser sort who have no conscience and no sympathy, that are guilty of such conduct. But, however, for us good wheelmen it is always a temptation."

Polly put another hickory stick on the fire. She said nothing, but she seemed to be thinking violently.





#### BOOKS FOR TOURISTS.

#### Sweetser's Guide-Books.

Carefully revised to date, \$1.50 each.

New England. 6 maps, 11 plans.

The White Mountains. 6 maps, 6 panoramas. The Maritime Provinces. 4 maps, 4 plans.

"Incomparable hand-books for the tourist." - N. Y. Evening Post.

#### Riverside Paper Series and Ticknor's Paper Series.

Both comprising over 100 books, many of them by America's greatest and most popular writers, including

HAWTHORNE, HENRY JAMES, Mrs. Kirk, HOLMES, BELLAMY, MRS. OLIPHANT, MISS HOWARD, Howells, CRAWFORD, EMERSON, BRET HARTE, HARDY, MRS. AUSTIN, Mrs. Stowe, COOPER, MISS JEWETT, ALDRICH, MRS. BURNHAM. Miss Phelps, MRS. DELAND, and many others.

Price, in strong, tasteful paper covers, 50 cents each.

N. B.—Full lists of both of these Popular Series will be sent on application.

#### Thoreau's Writings.

"His power of observation seemed to indicate additional senses. He saw as with microscope, heard as with ear-trumpet; and his memory was a photographic register of all he saw and heard."—R. W. EMERSON.

WALDEN; or, Life in the Woods. \$1.50.

\$1.50. A Week on the Concord and Mer-RIMACK RIVERS. \$1.50.

Excursions in Field and Forest. \$1.50.

CAPE COD. \$1.50. THE MAINE WOODS. \$1.50. LETTERS AND POEMS. \$1.50.
A YANKEE IN CANADA. \$1.50.
EARLY SPRING IN MASSACHUSETTS.
\$1.50.

SUMMER. From Thoreau's Journal. \$1.50.

WINTER. From Thoreau's Journal. \$1.50.

#### John Burroughs' Books.

"The minuteness of his observation, the keeness of his perception, give him a real originality, and his sketches have a delightful oddity, vivacity and freshness."—The Nation.

WAKE ROBIN. \$1.25.
The Same. Riverside Aldine Series.

WINTER SUNSHINE. \$1.25. BIRDS AND POETS. \$1.25.

Locusts and Wild Honey. \$1.25. Pepacton. A Summer Voyage. \$1.25. Fresh Fields. \$1.25. Signs and Seasons. \$1.25. Indoor Studies. \$1.25.

For sale by all Booksellers. Sent, post-paid, on receipt of price, by the publishers,

Houghton, Mifflin & Co., Boston.

"Half the effectiveness of advertising is in the setting of it."

NATH'L C. FOWLER, Jr.

Doctor of Advertising

## MODERN TYPE OF...



## BUSINESS BRINGING POWER

Plair Strong, Clear, Eye-Delighting Type



Manufactured and Sold by

## Phelps, Dalton & Co.

DICKINSON TYPE FOUNDERY

150 Congress St. Boston



This advertisement is set in De Vinne and Howland Series of type. Ask the printer to use in your next advertisement.

## We will send you

UPON APPLICATION

Catalogues of our

## Silver Plated Ware

Showing Prize Cups and

Articles suitable for Prizes.

If you intend holding a Meet or Field-Day, We can save you money.

SPECIAL DISCOUNT TO CLUBS.

## THE WM. ROGERS MANUFACTURING CO.,

P. O. Drawer 30,

HARTFORD, CONN.

## UNDERHAY OIL CO.

Cylinder, Spindle,

Machinery, Screw Cutting,

and Wool Oils.

## BICYCLE OILS a specialty

SOLE PROPRIETORS OF THE

#### CELEBRATED MONARCH OILS.

Office and Warehouse,

275 FRANKLIN STREET,

BOSTON, MASS.

JOHN UNDERHAY, President. GEO. N. SPEAR, Treasurer.
D. J. Goss, General Manager.

## Bicycle Riders Must Have Good Eyes.

#### SLEEPER'S EYE

Is the most popular Eye in New England.

If you want to keep your Eyes in good condition, smoke

## Sleeper's Eye Cigars



No Artificial Flavoring, but the Best Quality of Tobacco.

### Buy Them! Smoke Them! Recommend Them!

They will satisfy you, and please your friends.

S. S. SLEEPER & CO.,

FACTORY,

BOSTON.

## Bicycle Watches

AND MONTH INDEX AND CHANGES OF MOON. A NOV-ELTY AT MODERATE COST.

SHREVE, CRUMP & LOW CO.,

TREMONT, COR. WEST ST.,
BOSTON.

# PRIZES for BICYCLE TOURNAMENTS.

In Sterling Silver and Electro Plate.

Designs and Estimates Furnished.

CORRESPONDENCE SOLICITED.

Shreve, Crump & Low Co.,

AGENTS OF THE

CORHAM MAN'F'C CO.

## HENRY H. TUTTLE & CO.,



\* \* WASHINGTON, COR. WINTER ST.

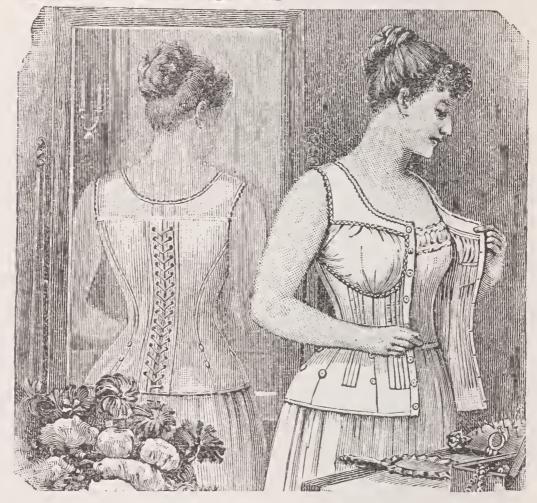
Bicycle and Tennis Shoes,

IN FINE AND MEDIUM GRADES.

HENRY H. TUTTLE & CO.

"THE FASHIONABLE CORSET SUBSTITUTE."

## EQUIPOISE WAIST For Ladies.

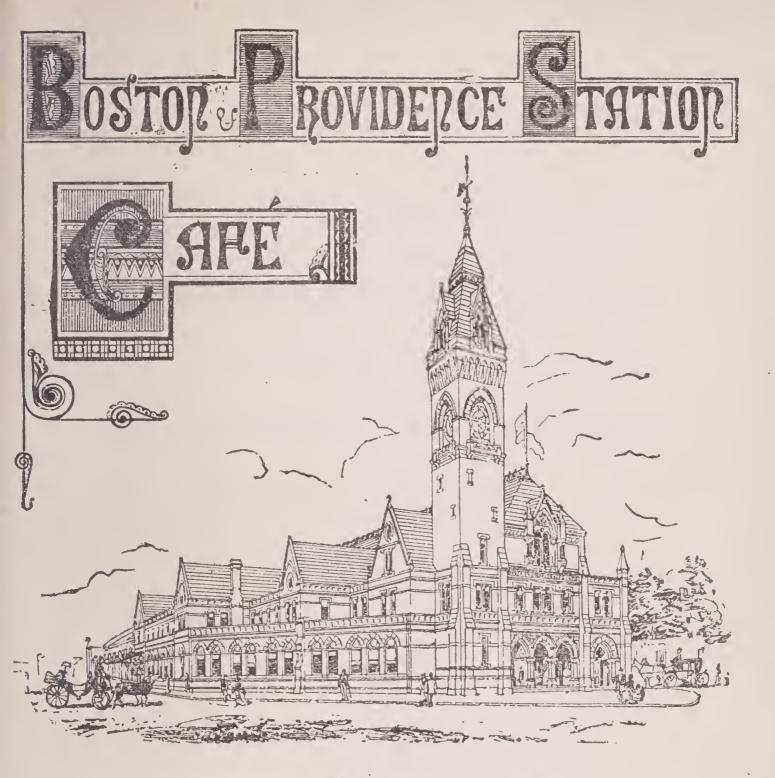


The best thing for Lady Cyclists to wear, when riding.

If not sold in your city, you can order from us by mail, without extra expense.

## GEORGE FROST COMPANY,

31 Bedford Street, BOSTON, . . . MASS.



SOLUMBUS: 24 VENUE, : 2BOSTON.

J. G. COOPER.

One of the best places in Boston to patronize.

Prices reasonable, wheels cared for while luncheon is served.

\$6 Tickets for \$5.

J. G. CCOPER.

#### HOTEL ANSONIA,

NEW BRITAIN, CONN.

Rates \$2.50 per day,

#### MANSION HOUSE,

MILFORD. MASS.

Rates \$2,50 per day.

#### AMERICAN HOUSE,

LOWELL, MASS.

F. E. SHAW, Proprietor.

Rates \$2.50 per day.

#### WOODLAWN PARK HOTEL,

AUBURNDALE, MASS.

J. H. LEE, Proprietor.

FIRE, ACCIDENT, EMPLOYERS' LIABILITY, General Liability, Elevator, Boiler Explosion, Cyclone, Tornado, Plate Glass, Transportation

# INSURANCE, JOHN C. PAIGE,

20 Kilby St., Boston.

# BREWER & STEVENS

### Gailors

488 Washington Street, Boston.

(Nearly opposite Temple Place.)

THE testimonials received from clubs and riders is the best guarantee that all who may favor us with a call will be satisfied with their treatment.

# BOSTON MAP STORE.

#### DAMRELL & UPHAM,

DEALERS IN

#### Maps, Atlases and Cuide Books,

283 Washington Street.

OUR ASSORTMENT of Maps and Atlases is the largest in New England, and includes

Mounted Maps for Offices and Libraries,

AS WELL AS

#### Pocket Maps for Wheelmen and Tourists.

Pocket Maps of the United States, as well as Special Maps of each state.

MAPS OF EACH COUNTY IN THE STATE, folded for the pocket, each, 75 cents.

Maps of the country around Boston, covering about thirty miles North
and South of Boston, in sheets, - - - - \$1 00
On Cloth, to hang up, - - - - - 3 00
On Cloth, to fold up, - - - - - - 3 00
A smaller size, covering about half the distance, in pocket form, - 50

Any Map, Atlas or Guide Book not in stock will be obtained at short notice.

### Snap Shots

WITH THE

HAWKEYE

# KODAC KNACK,

OR WATERBURY HAND CAMERA.

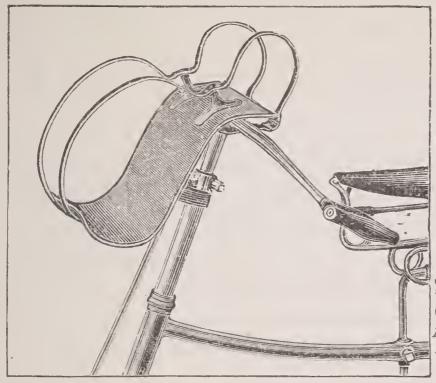
Films, Plates, Paper, etc.

SOLD BY

#### HORGAN, ROBEY & CO

Successors to C. H. Codman & Co.,

34 BROMFIELD STREET,



### LAMSON'S

No. 5 Tourist's

### Luggage Carrier

"Every member of our European Tour of of used one of these Carriers, and every one proved perfectly satisfactory."

F. A. ELWELL.

Lamson's No. 5 Carrier, \$3.50. Pat. May 16, 1891.

#### OTHER LICHTER CARRIERS.

No. 1, \$1.00. No. 4, \$1.25. No. 4, double, \$1.50 Send for circulars to C. H, LAMSON. 203 Middle St., Portland, Me.

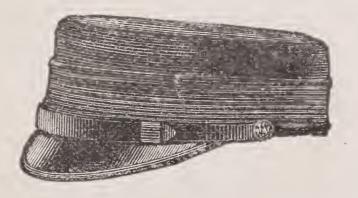
Every Cycle Tourist should join the League of American Wheelmen and wear one of the Gold Badges, Price, \$2.00 to \$5 00 and upwards. Send for catalogue and buy a Badge of C. H. Lanson, Inventor of the L. A. W. Badge and only authorized distributor of the same, 203 Middle St., Portland, Me.



# TAYLOR'S HAT STORE,

Corner Hanover and Court streets.

BOSTON.



We respectfully call attention to our large and varied stock of Hats, Caps, Gloves, Trunks and Bags. Honest merchandise at a fair profit.

One Price to all.

# VISITING TOURISTS

And Wheelmen, when in Boston, should call at our store. All the leading Daily Papers and Bicycle Papers. Illustrated Weeklies and Monthly Magazines kept on file, a register for names, a place to write with materials in abundance. In addition we will show you the finest bicycle building in the world, and, most important of all, a line of the best bicycles made—the COLUMBIAS.

POPE MFG. CO.,

221 Columbus Avenue.

# Ingalls & Kendricken,

Manufacturers of High or Low Pressure, Self Regulating Steam-Heating Apparatus, for warming and ventilating Dwelling Houses, Public Buildings, Hospitals, Schools Houses, Railroad Stations, Mills. Etc.

Office and Manufactory,

So & 82 SUDBURY STREET,

J. A. INGALLS.

BOSTON.

P. H. KENDRICKEN.

#### SOME HINTS TO TOURISTS.

NE of the first things to be considered, when going on a tour, is "what ye shall eat, what ye shall drink and wherewithal ye shall be clothed."

You may call for a grain of salt with any advice which tells you to take no thought as to the above, especially if it comes from an uninspired source.

If you intend to make your tour on a bicycle and you have not already become enamored of a particular make, the following advice may not be amiss. Certainly it will be worth all it costs, though to be frank with you, I don't mind admitting that "it is more blessed to give than to receive."

You will find all makers and dealers unanimous on a single point, we want your money (at first I wrote "they," but not wanting to make the E. H. Co. jealous, I changed it to "we").

All must offer you in exchange for your large round "simoleons" the kind of a bicycle they have on hand.

If your tour is a long one you must try and get a bicycle that will last until you get home, and if perchance there is enough left of it to sell you may get enough out of it to help you buy one of the new 93 pattern, which every maker it supposed to bring out.

Bicycle manufacturers are divided into two general classes; first, those who make wheels of hickory; and, second, those who think they may have to in the not far distant future.

Whether you decide to buy a Hickory bicycle or a steel one; whether you prefer the larger wheel in front or behind; whether you must have ball bearings or some other; buy your wheel for its intrinsic merit; buy it for the honesty of purpose that is behind it; buy it for the hard work you may want to get out of it; buy it as you would butter. Don't consider anything but the best.

I don't know that I would be permitted in an article of this kind to mention any names, but if you want to know what bicycle to tie up to, and you will quietly drop me a line, directed to Newton, Mass., I might be able (as I certainly am willing) to give you a "pointer."

STERLING ELLIOTT.

P. S. Please let me know how you enjoy your tour.







# Bicyclers'

# Kodaks.

#### NEW SERIES FOR 1892.

All the latest improvements.

For Films, or Glass Plates, or both.

Counter for registering film exposures.

New Safety Shutter.

No cap required for time exposures.

### Can be Loaded in Daylight!

No Dark Room Required.

A B
2\frac{3}{4} \times 3\frac{1}{4} \times 4
\$\\$8.50 \quad \\$15.00

4 x 5 \$25.00

C

Finished in leather. Better made and finished than many \$50.00 Cameras.

#### Without the Daylight Feature,

**A** \$6.00

**B** \$10.00

**C** \$15.00

Finished in Polished Wood.

Complete developing and printing outfit for 24 pictures, \$1.50.

Send for Circular.

THE EASTMAN COMPANY,
ROCHESTER, N. Y.



BRANCH HOUSES
12 WARREN ST NEW YORK 291 WABASH AVE CHICAGO.
FACTORY HARTFORD CONN.









